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# ***JPRS Report***

# **China**

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**Western Marxist Theories on 'Question of the State'**

*HK0806044188 Beijing GUANGMING RIBAO in Chinese 23 May 88 p 3*

[Article by Zhang Dewen [1728 1795 2429] and Mu Ye [4476 0048]: "Principal Western Marxist Theories On the Question Of the State"]

[Text] Since the end of the Second World War, the rapid economic development of the advanced capitalist countries in the world has greatly pushed forward the "internationalization" of capital and rocked the original status of "nationality and state." With the emergence of a large number of new industrial departments, profound changes have taken place in the industrial structure and social structure of all the major capitalist countries in Europe and America. The emergence of the "new middle class" has directly helped to bring about some changes in the internal structure of the capitalist countries. As a result, the economic functions of the capitalist countries have been greatly strengthened. Especially, in the infrastructure-related industrial departments and in the labor service departments, the state has actually become the indispensable decisive factor in terms of increasing investment and creating more jobs. Because of these changes, since the mid-1950's, researchers of Western Marxism in the west have actually shifted the focus of their study to the question of the state and have established a number of new theories on the state. The concrete analysis carried out by the researchers of Western Marxism on the state machinery of the advanced capitalist countries demonstrates that the researchers of Western Marxism have carried out detailed and meticulous study and heated discussions on "Western Marxism." The study and discussions carried out on Western Marxism are the most detailed, meticulous, and heated ones since "Western Marxism" was established in the 1920's. Researchers of "Western Marxism" in France, the Federal Republic of Germany, and the United States have made a large number of discourses on the question of the state. These discourses have already had a profound impact on the politics of these countries. The most outstanding theories on the state in the West are "Structuralism," which is represented by (Pranchas) [2528 5695 2686 2448], "Instrumentalism," which is represented by (Milipant) [4717 6849 3803 1795], and the "New Orthodox School," which is represented by a group of intellectuals at the Berlin Freedom University.

(Pranchas) has explored the problems in the capitalist state by taking politics, economy, and ideology, which are the three "structural aspects" of the capitalist state, as his theoretical basis. According to (Pranchas) the functions of the capitalist state are created by "state politics" or "structure" involved in the capitalist production method and by the relations between "state politics" or "structure" involved in the capitalist production method and other "aspects" or "structures" of the capitalist state. The functions of the capitalist state are restricted by these "structures" and "relations."

(Pranchas) has summed up the three most important characteristics of the capitalist state: First, the capitalist state does not directly represent the economic interests of the ruling class, but instead, represents the political interests of the ruling class; the state is the center of the political power of the ruling class. Second, the capitalist state is usually formed by several ruling classes or "ruling parts," which together form a "power clique." However, only one of these ruling classes or "ruling parts" occupies the dominant position in the "power clique;" Third, the rule by the ruling class or "ruling part" which occupies the dominant position in the "power clique" helps to integrate the special position and role of ideology with the political aspect of the capitalist social formation so as to enable the capitalist ideology to play its role in the political field.

(Milipant) believes that in the capitalist society, the state is primarily a "forceful instrument" of the ruling class. The definition of the state itself is based on the "possession of the means of production." Just like using an instrument, the ruling class in the capitalist society exercises the state powers. The ruling class either directly controls the state machinery and formulates the state policies or indirectly exerts pressure on the state and manipulates the state machinery behind the scenes.

After conducting a meticulous study on the relations of capital and the social relations determined by the relations of capital, (Aerwate) [7093 1422 3907 3676], the representative of the "New Orthodox School," points out that only when an independent state exists will the capitalist social relations be reproduced and the interests of the total social capital be protected. (Aerwate) thinks that a capitalist state has the following four functions: First, to provide ordinary material conditions, mainly the infrastructure, to the reproduction of capital; second, to establish and guarantee the common legal relations so as to help to realize the relations of legal entities in the capitalist society; third, to adjust the conflict between wage labor and capital and if necessary, to politically suppress the working class through law, police, and armed forces; fourth, to ensure the existence, contention, and expansion of its national capital on the capitalist market in the world.

Although these Western Marxist theories on the state differ from one another and even contradict one another with regard to their methods of study and concrete contents, they have described and reflected the similarities and differences between the phenomena and formation of the present-day capitalist countries and the phenomena and formation of the capitalist countries around the 19th century and provided new viewpoints and new methods for us to understand and carry out investigations on the present-day capitalist countries, carry out an in-depth study on the Marxist theories on state, and further develop the Marxist theories on the state.

**Discussion on 'So-Called Western Marxism'**  
HK0506041088 Beijing RENMIN RIBAO in Chinese  
27 May 88 p 5

[Article by Du Zhangzhi (2629 5445 2535): "A Talk on the So-Called 'Western Marxism"'; excerpted from XIANDAI ZHEXUE [MODERN PHILOSOPHY] No. 1, 1988]

[Text] The so-called "Western Marxism," which was introduced into China a few years ago as a non-Marxist trend of thought, has attracted wide attention in the academic community and among young students in our country. At first, people could in general understand it only from the reference lines of the articles of those who introduced the idea into the country. However, with a little more study, they found more and more problems in it. Hence, there are various views among the researchers on the concept of "Western Marxism." Some comrades point out that the concept lacks a proper scientific character.

"Western Marxism" is not a concept universally accepted abroad and the theoreticians we usually view as proponents of the concept are not all necessarily regarded abroad as "Western Marxists" or non-Marxists. Some figures, such as Antonio Gramsei, Georg Lukacs, and (Arduse), are regarded as outstanding Marxists even in the countries where the orthodox concepts are predominantly held as usually viewed by many. For example, I have translated Arduse's masterpiece "Safeguard Marx" and many other works written in his later years, including "Lenin and Philosophy." While translating them, I had access to various comments and briefings. I feel that judging from his theories, though there are points open for discussion, he really wanted to safeguard Marxism and moreover, he already made important contribution to Marxist philosophy. However, some Western bourgeois scholars misrepresented him, calling him a "Western Marxist" who willfully trampled on Marxism. This distorted argument really strayed too far from the facts.

Later on, I conducted a study into Lukacs. I compiled the materials written by Lukacs about himself into a book called "An Autobiography of Lukacs." Recently, together with Comrades Hongyuan and Boyou, I have translated his most controversial book "History and Class Consciousness" into Chinese. I feel that Lukacs was a thinker who was closely bound up with revolutionary movements rather than a scholar who singly invented theories behind the closed doors of his study. From 1918 when he joined the Hungarian Communist Party to his last breath, he was loyal and devoted to the Hungarian and international revolutionary labor movements. His explorations into theory were bold and some mistakes were, therefore, hard for him to avoid. Nevertheless, he had a sharp mind and frequently put forth new ideas whose correctness was realized by his party leaders only some years later. Not long after the publication of his work "History and Class Consciousness" in 1923, it was

repudiated by the Communist International as being "theoretically revisionist" and Lukacs had to make repeated self-criticisms for it. However, the "Program for Commemorating the 100th Birthday of Lukacs" issued by the Hungarian Party Central Committee in 1983 set a considerably high value on the book's theoretical contributions. The rightful historical place of the book in the struggle against the Second International's mechanical materialism and the development of Marxist theory is being restored. Now the Hungarian social scientific community has regarded Lukacs' rich ideological legacy as the foundation for further theoretical development. Some arguments in the book "History and Class Consciousness" will surely play their own roles.

The book "History and Class Consciousness" has no doubt had an extensive influence on the Western ideological community. This is a well-recognized fact. However, its influence is very complicated. For example, in Italy and Yugoslavia, some young people said: It is only after reading Lukacs' "History and Class Consciousness" that they took the Marxist road. Some scholars distorted Lukacs's viewpoints to serve their own needs. Some schools of the so-called "Western Marxism" indeed took quite a few things away from this book but this relationship should not be excessively exaggerated. For example, scholars of the FRG have proved that there were few things in common between the Frankfurt school of thought and Lukacs, the former being critical of the latter. We should not regard Lukacs as the founder of the so-called "Western Marxism" and his "History and Class Consciousness" as initiating the so-called "Western Marxist" ideological trend just because of this. In addition, the so-called "Western Marxism" claims itself to be antagonistic to Leninism but many arguments in Lukacs' "History and Class Consciousness" stress that Marxism is just a methodology and dialectics, the role of the proletariat's class consciousness, and the theories on the party. Therefore, we cannot say there is no consensus at all between his arguments and Leninism.

Gramsei was one of the founders of the Italian Communist Party. In 1926, before he was jailed by the fascists, he was the leader of the Italian Communist Party. In prison, fighting heroically, he unremittingly continued to explore revolutionary truth and wrote "Reading Notes in Prison." The ideas of the work became the theoretical basis guiding the activities of the Italian Communist Party. It is obviously not appropriate to link such a figure together with "Western Marxism." The focus of the current debate seems to center on whether Gramsei's philosophical thinking is idealist. It must be said that there are indeed some remarks in his "Reading Notes in Prison," if viewed in an isolated way, they seem to show Gramsei's philosophical thinking has an idealist tendency. However, consideration should be given to the fact that Gramsei created the work while in the perilous position of being jailed and he did not compile a textbook. It is, therefore, impossible for him to attend to each and every aspect of everything he wrote and also

impossible for him to expound his thinking comprehensively and fully. Without a doubt, many of his ideas cannot be put into the framework of the current textbook on Marxist basic tenets.

Lukacs, Gramsei, and Arduse were loyal communists and outstanding Marxists. Under their own historical conditions, they upheld and developed Marxism, thus making outstanding achievements. Of course, they were not immune from mistakes. We should have seriously studied the environments in which they waged a struggle and their experiences, both positive and negative, in upholding and developing Marxism to further our understanding of Marxism but for a long time, we have tried every means to prove they were not Marxists. The moment when they were introduced to China, they were lumped together with thinkers such as Sartre and proponents of the Frankfurt school of thought, who had very little to do with Marxism and given the label of "Western Marxism." I think it is time to clarify this issue.

Among other things, what must be pointed out is that "Western Marxism" is not a concept of definite connotations universally accepted by people abroad. On this issue there are too many versions to mention. To sum up, there are three commonly seen usages concerning the term of "Western Marxism."

**1. The regional concept.** Some scholars advocated dividing Marxism according to different regions. For example, Marxism can be divided into three categories: "Oriental," "Western," and "Third World" Marxism. According to this theory, "the Orient" includes socialist countries including the Soviet Union, Eastern Europe and China; "the West" refers to developed capitalist countries in Europe and the Americas; and "the Third World" refers to underdeveloped capitalist countries in Asia, Africa, and Latin America. This concept of "Western Marxism" includes not only the independent Marxist scholars in developed capitalist countries in Europe and the Americas but also the theories of the communist parties of the various countries in that region.

**2. Merleau-Ponty's concept.** Maurice Merleau-Ponty is a famous French bourgeois philosopher. In "The Adventures of Dialectics" he published in 1955, Merleau-Ponty advanced the concept of "Western Marxism." The "Western Marxism" as he termed refers to the theory expounded in Lukacs's "History and Class Consciousness," a theory that stresses dialectics and the subjective revolutionary character of the proletariat. He sets "Western Marxism" against Leninism, arguing that this is a conflict between dialectical thinking and naturalism.

This concept of "Western Marxism" stresses the tendency toward dialectics and subjective revolutionary character. It seems only they and their like-minded "Western" Marxists can have this understanding while "Oriental" Marxists can on no account have such an understanding. History has proved that this view is

wrong. In fact, sometimes, many Marxists in the Orient (including Mao Zedong), with Lenin as the most prominent, put particular stress on dialectics and revolutionary consciousness. If we look over Lenin's "Notes on Philosophy," we will find that in 1914, Lenin discovered again in Marxism Hegel's dialectics that lays stress on the importance of consciousness and subjective factors.

As Merleau-Ponty pointed out there is some truth to the argument that in the course of Marxist development, there is a tendency to stress dialectics and subjective revolutionary character, after he published his book "The Adventures of Dialectics," the concept of "Western Marxism" was accepted by some scholars in the West.

**3. Perry Anderson's concept.** Perry Anderson is a very influential British neo-leftist theoretician. He advanced his concept of "Western Marxism" in his book "An Exploration on Western Marxism" published in 1976. The concept refers to the Marxist theories advanced by a new generation of theoreticians who came to the fore after Stalin assumed power in 1924. The concept is "both epochal and regional in nature."

Anderson summarized the whole development of Marxist theory into a change of several generations of people. He classified Marx, Engels, Lenin, Trotsky, and 9 others as the classical tradition of Marxism. He maintained that with the passing away of Lenin and the very rapid rise of Stalin to power, the Marxist classical tradition ended as a whole. Hence, there was no more Marxism in the Orient. Thanks to the works of Trotsky who was in exile and the efforts of his successors, the classical tradition could spread in the West. At this time in the West, a new generation of theoreticians had emerged along with the changed situation. Entirely different from the classical tradition, their Marxist theories formed a new academic structure, which Anderson termed as the tradition of "Western Marxism. In his name list of theoreticians of this tradition, there are Lukacs, (Kirsche), Gramsei, Benjamin, (Wokheim), (De La Volpe), (Marcuse), Lefevre, (Adorno), Sartre, Goldman, Arduse, and (Kelaidi).

Anderson contended: The "Western Marxist" tradition has the following characteristics: 1) Theory is divorced from practice; 2) pessimism prevails among proponents; 3) the theoretical priority has shifted from the concrete analysis of political and economic affairs to the research and exploration of philosophy; 4) the language used is getting more and more specialized and has become difficult to understand; 5) this tradition, influenced by all types of idealist philosophies in Europe, explores the origin of Marxism in the bourgeois philosophies before Marx; 6) it lacks internationalism and there is no theoretical connection between advocates.

In the conclusion of his book "An Exploration on Western Marxism," Anderson made a comparison between the "Western Marxist" and classical traditions. The classical tradition he referred to here is the tradition of Trotsky, on which he set an exceptionally high value.

He said: The tradition of Trotsky is free from the major defects of the tradition of "Western Marxism." The two "exactly formed an extreme contrast."

With the publication of his book "An Exploration on Western Marxism," his concept of "Western Marxism" was criticized by some Western scholars. They criticized his concept as being very unscientific, arguing that the list of names he drew up could not reflect the current developments of Marxism in the West and that the common characteristics he elaborated did not hold water and some of them could not tell the difference between "Western Marxism" and Marxism. They even called Anderson an orthodox Trotskyist and his concept of "Western Marxism" the rubbish of Trotskyism. So long as we rather seriously study Anderson's "An Exploration on Western Marxism," we will firmly believe that their criticisms are correct.

What I have discussed above is several usages of the concept of "Western Marxism" seen in foreign countries.

Since the October Revolution, especially since World War II, as Marxism developed greatly, there have emerged all brands of Marxism. Anderson's so-called "Western Marxism" is also the product of this great development. How should these versions of Marxism be approached? Upholding the Trotskyist stand, Anderson said only Trotskyism is genuine Marxism; the communist party is not Marxist; and "Western Marxism" is Marxism with defects. All these arguments are of course wrong. However, on the contrary, the argument asserting that we and we alone are genuine Marxists I think is also

not correct. There is definitely only one truth to Marxism but the interpretation (understanding and use) of this truth may possibly many and varied.

Our party maintains: Mao Zedong Thought is the product of the integration of the universal principles of Marxism-Leninism with the concrete practice of the Chinese revolution. However, we must also realize that other countries, parties, and theoreticians have their own "integrations." Since the cultural tradition, development stage, and concrete revolutionary situation vary from country to country and the subjective quality to achieve such an "integration" in practice vary from theoretician to theoretician, the "integration" will assume various forms. This is an inevitable phenomenon and also the indicator of the vigorous development of Marxism. We have only reason to welcome and no grounds for negating it in summary fashion. These many and varied versions of Marxism (that is, the interpretation of Marxism) involve a question of whether they are soundly or correctly interpreted. However, before we study them carefully, we should refrain from making arbitrary judgments. We have suffered from the notion of thinking oneself as "the only revolutionary" and "the only Marxist" in the past. Now we should not repeat it.

For quite some time, the concept of "Western Marxism" has been used by the Chinese academic circles in summary fashion as a "non-Marxist" concept. This is indeed detrimental to our conducting of a realistic study into contemporary Marxism in foreign countries. In studying and introducing the contemporary schools of Marxism abroad, it is time, I think, for us to discard this concept. My purpose in advocating this is not to say that foreign scholars should also abandon the concept but to say that we should accurately introduce how foreign scholars interpret the concept to the Chinese readers.

## NATIONAL AFFAIRS, POLICY

### National Symposium on Contract System Continues

SK1706064088 Changchun Jilin Provincial Service in Mandarin 2100 GMT 16 Jun 88

[Text] The national symposium on theoretical and practical study of the contract system continued on 16 June.

Zhang Yanning, vice minister of the State Commission for Restructuring the Economy, and He Zhukang, secretary of the provincial party committee and governor of the provincial government, made lengthy speeches at the symposium.

Zhang Yanning said in his speech: Over the past year since the enterprise contract system was generally popularized throughout the country, we have experienced unexpected achievements and have made great progress in the theoretical and practical study of the system. Since the central authorities set forth arrangements for price and wage system reforms recently, we have confronted some new tasks concerning further development of the contract system. The symposium, which was convened under such a situation with a view to jointly solving the problems, will bring about advantages to the future reform.

Comrade Zhang Yanning said: The party Central Committee and the State Council have clearly defined the principles for deepening enterprise reform this year. The major aspect of the principles is to coordinate, improve, deepen, and develop the contract responsibility system. It is necessary to introduce the competition mechanism into the contract system. Conditions should be created to develop short-term contracts into long-term contracts. We should pay particular attention to the reform of the personnel affairs, labor, and distribution systems in order to consolidate enterprises' basic management work.

He said: Comrade Zhao Ziyang expected that this year would be a year when greater economic results could be created through implementation of the contract system. Our theoretical and practical workers should deepen the study of the practical situation and new problems cropping up in the course of implementing the contract system, set forth suggestions actually in line with the situation and problems, and make concerted efforts to further promote the improvement and development of the contract system, to create favorable conditions for conducting the next-step price and wage structural reform, and to make new achievements in this year's reform and economic development.

In his speech, Comrade He Zhukang introduced the province's situation and experiences in implementing the contract system over the past 6 years and the problems relating to the current contract system.

With regard to the issue concerning how to continuously improve and develop the contract system, Comrade He Zhukang said: At present, the contract system has stepped from the initial stage to a stage of coordinating, improving, deepening, and developing itself. Meanwhile, we are faced with a new situation to conduct the price and wage system reform. So, we must grasp the core of stabilizing the operational mechanism of enterprises, proceed from the reality where the contract system and the price structural reform are related to and promote each other, further emancipate our minds, bravely blaze new trails, and ceaselessly improve and develop the contract system in the course of implementation. We should do a good job in enforcing the rules defined in the contracts so that the mechanisms and functions that have initially taken shape will be improved in a step-by-step manner. We should be suited to the new situation concerning price structural reform, optimize the contract structure, gradually set up a mechanism where enterprises should assume full responsibility for their profits or losses, and explore new ways for developing the contract system. It is necessary to develop contract markets, further enhance the competition mechanism, promote the rational distribution of the production factors and the deepening of reform, change the method under which collective enterprises are undertaken by the government departments on a contracted basis, and study and formulate patterns for conducting reform among collective enterprises on the basis of restoring the nature of the collective sector of the economy and [words indistinct]. Based on the method under which the province should take the responsibility for fulfilling the tasks assigned by the state, we should do a good job in conducting the overall necessary reform supports and creating a favorable environment for carrying out the enterprise contract system.

Ma Shengli, director of the Shijiazhuang paper mill, and (Hou Wei), professor of China People's University, also made speeches at the symposium.

### Qian Jiaju on Three Gorges Project

HK1105041188 Hong Kong WEN WEI PO in Chinese  
4 May 88 pp 1, 2

[Article by Qian Jiaju (0578 1367 7467): "A Text Of Democratically and Scientifically Making Policies"—"Subheads supplied WEN WEI PO editor"]

[Text]

### Several Typical Examples

Since the founding of the PRC, our country's economic construction has suffered some failures. There are two main reasons for this: First, our country's economic construction followed an ultra "Left" political line. After the founding of New China, originally, we should have made economic construction our main task. However, we failed to do that. Instead, we "took the class struggle as the key link" and carried out political movements year

after year. The most disastrous political movement we have carried out was the Cultural Revolution. Second, the leaders of our country had a fondness for the grandiose and were over anxious for quick results. When making macroeconomic strategic decisions concerning the capital construction, the leaders of our country acted subjectively, blindly, unscientifically, and undemocratically. For over 30 years, our country followed an unrealistic and impractical economic line characterized by high speed and low efficiency. According to the statistics, between the 1950's and 1980's, our country made an investment of a total of 600 billion yuan in the capital construction. However, our country only has some 400 billion yuan of fixed assets. This figure shows that our country has wasted a total of 200 billion yuan. Moreover, our country has also suffered losses in the construction of the big and small third-line projects. Here, I'd like to cite several typical examples which show that the losses in our country's economic construction were caused by incorrect decisions made by the leaders who had a fondness for the grandiose: First, the Sanmen Gorge Project on the Huanghe. Before the scientific demonstration of the construction plan of the Sanmen Gorge Project was completed, the construction of the project was hurriedly started simply because "a holy man appeared and the Huanghe should become clean at once." Was it true that a "holy man" who had not been seen for thousands of years now appeared in China? How could Huanghe still remain muddy after the "holy man" had appeared? Besides, what was the actual result? The result was that the construction of the project had to be stopped in the middle because the problem of silt could not be solved. Second, the Gezhouba Project. The Gezhouba Project was a huge one. However, after receiving only a few design drawings submitted by the Wuhan Military Region and the Hubei Provincial Revolutionary Committee, Chairman Mao hurriedly approved the construction of the project. Originally, the construction of the project was estimated to cost "1.35 billion yuan." "It is estimated that after 3 years of construction, the project will start to generate electricity; and after about 5 years, the project will be completed." However, what was the result? The result was that the construction of the Gezhouba Project cost a total of over 4.8 billion yuan. The project started to generate electricity after 11 years. And the whole project was finally completed after 18 years of construction. Therefore, it is not surprising that some people call the Gezhouba Project a "fishing project" (A fishing project means that at the very beginning, the project is said to need only a small amount of investment. However, once the construction of the project starts, more investment is needed in the project. If no more investment is made in the project, then the construction of the project has to be stopped in the middle). Some people also call such projects "nodded projects" ("Nodded projects" are the projects whose construction is approved only by a nod given by a certain leader.). In the past, we suffered huge losses and paid too high a price in building such "fishing projects" and "nodded projects." However, it is quite strange that such

"fishing projects" and "nodded projects" have continued to be built one after another up to the present. This is because first, some of our country's leaders still have a fondness for grandiose and are still overanxious for quick results. Even if the leaders make wrong decisions and the construction of the projects has to be stopped later on, the leaders who make the wrong decisions will not be held legally responsible and do not receive disciplinary sanctions for causing the losses. And these leaders will not be impeached in the NPC. And these leaders will still be able to "run office and act willfully."

#### The Enormous Impact of the Projects

Has the above mentioned situation shown any improvement over the past few years? We should acknowledge that there has been some improvement over the past few years with regard to the above mentioned situation. This is because over the past few years, we have proposed scientific and democratic decision-making. We have proposed that feasibility studies must be carried out for major capital construction projects. And only after the scientific demonstration is carried out by the experts concerned will the decision on the construction of the major capital construction projects be made. As far as the question concerning the scientific and democratic decision-making is concerned, the construction of the Three Gorges Project on the Changjiang now faces a serious test.

The Three Gorges Project on the Changjiang is the biggest key water control project to be built in our country since the founding of the PRC. The project is not only the biggest key water control project in China but also the biggest key water control project in the world. Even the United States, which has the most advanced science, technology, and productive forces in the world, has not built as big a key water control project as the Three Gorges Project on the Changjiang. A huge amount of investment is needed on the construction of the Three Gorges Project on the Changjiang. Compared with other key water control projects in the world, the construction of the Three Gorges Project on the Changjiang will certainly have a greater impact on the navigation, electric power generation, flood prevention and control, environmental protection and sanitation, and ecological balance in the region. Moreover, a huge number of people will be mobilized to take part in the construction of the Three Gorges Project on the Changjiang. Therefore, the construction of such a project will naturally attract great attention both at home and abroad. Just as Comrade Zhou Peiyuan said: "The Three Gorges Project on the Changjiang which runs from the east to the west in China will cut the Changjiang in the middle. Because the construction of the project will take place in the high gorge area which leads to the plains in the middle and lower reaches of the Changjiang, it will certainly have a great impact on the social environment and ecological environment in the surrounding regions. Therefore, many predictable and unpredictable major problems are bound to emerge during the construction of the project.

And within a short period of time, we cannot clearly know what these major problems will be. If any accident happens during the construction of the project, enormous harm and damage will be done to the future generations of our nation. Therefore, the construction of the Three Gorges Project on the Changjiang is a very complex matter which cannot be settled by only relying on the help of foreigners. Any mistakes that are made in the construction of the Three Gorges Project will be quite different in nature from the economic and technological mistakes we made in the construction of the Baoshan Iron and Steel Complex."

#### The No. 15 Document

The State Council has adopted a very prudent attitude in deciding whether to carry out the construction of the Three Gorges Project on the Changjiang or not. Such a prudent attitude is quite necessary and recommendable. In June, 1986, the State Council issued its No. 15 Document ("The Notice Of The CPC Central Committee On The Relevant Questions Concerning The Work Of Scientific Demonstration Of The Three Gorges Project On The Changjiang"). The main contents of the No. 15 Document of the State Council can be divided into the following three aspects: (1) The Ministry of Water Resources and Electric Power will extensively organize the experts concerned to carry out further scientific demonstration and revision of the original feasibility report on the Three Gorges Project on the Changjiang. The Ministry of Water Resources and Electric Power will invite the experts who hold widely divergent views to attend the discussions on the construction of the project— (2) The Three Gorges Project Examination Committee of the State Council will be set up.

The Three Gorges Project Examination Committee will be responsible for the examination of the Three Gorges Project Feasibility Report submitted by the Ministry of Water Resources and Electric Power and then submit the feasibility report to the central authorities and the State Council for approval. Finally, the Three Gorges Project Examination Committee of the State Council will submit the Three Gorges Project Feasibility Report to the NPC for examination and review.). (3) In order to strengthen the leadership over the work of building the Three Gorges Project on the Changjiang, the central authorities have appointed Comrade Li Peng, Comrade Bo Yibo, Comrade Wang Renzhong, and Comrade Cheng Zhihua to take charge of and coordinate the work concerning the scientific demonstration of the Three Gorges Project.

Now, the work regarding the scientific demonstration of the feasibility of the Three Gorges Project is under way. However, recently, various signs have shown that it is still uncertain whether the scientific demonstration of the feasibility of the Three Gorges Project on the Changjiang can be fairly and objectively carried out or not. I

not only have reservations on but also doubt the fairness and objectiveness of the scientific demonstration of the feasibility of the Three Gorges Project on the Changjiang. Why?

#### The Internal Instructions Before The Meeting

The premise of scientific demonstration is democratic decision-making. Without democratic decision-making, scientific democratization would be impossible. If different views cannot be heard or those who hold different views are banned from expressing their views, scientific demonstration would become impossible or would look impressive but lack real worth. At the national Scientific Research Work Symposium held on 31 July, 1986, Comrade Wan Li said: "The premise for the so called scientific decision-making is democratization. Without democratization and free expression of views and thoughts, respect for knowledge, qualified personnel, wisdom created by the people, and practical experiences would become impossible and so would the scientific decision-making." Have we realized democratization? As far as the 7th CPPCC is concerned, before the 7th CPPCC was concluded, the press received an internal instruction demanding a strict censorship on the reports concerning the Three Gorges Project on the Changjiang. Why? It was learned that the authorities thought the question of the Three Gorges Project was a very complex one and reports concerning the subject might divert the theme of the "Two Conferences." (The fact is that the authorities said that not only the Chinese experts but also the foreign experts believe that the construction of the Three Gorges Project should be carried out. And the authorities urged all those concerned not to listen to the views of those who oppose the construction of the project any more.) As a result, although there was strong opposition to the building of the Three Gorges Project both during the panel discussions and the assemblies of the 7th CPPCC and in the speeches addressed to the 7th CPPCC by the deputies, nothing concerning the project was filed, published in the newspapers, broadcast live on the radio, or televised live on the television. All the news concerning the discussion on the construction of the Three Gorges Project was blockaded. (At the very beginning, I did not believe that all the news concerning the discussion on the construction of the Three Gorges Project on the Changjiang during the "Two Conferences" was blockaded because I thought that since "Two Conferences" were to hold reelections, democracy would have been greatly developed during the "Two Conferences." Unfortunately, it is true that all the news concerning the discussion on the construction of the Three Gorges Project was blockaded.)

Secondly, the Hunan Science and Technology Publishing House has published a book entitled "On Macroscopic Decisionmaking Concerning The Three Gorges Project." The book has collected the views and essays of many of our country's well-known experts on the Three Gorges Project (such as Li Rui, Tsun Yueqi, Lin Hua, Lu

Qinkan, Fang Zongdai, and so on). The book has been prefaced by Zhou Peiyuan, the well-known scientist and vice chairman of the CPPCC. Originally, the publication of the book was quite a normal matter. However, when the leaders of the Ministry of Water Resources and Electric Power found out about this book, they put pressure on the Hunan Science and Technology Publishing House through various channels and demanded the publishing house stop publishing the book. The Hunan Science and Technology Publishing House resolutely resisted the pressure and published the book as scheduled. After the book was published, Professor Wang Ganchang (Wang Ganchang is also a division member of the Academy of Sciences of China) wrote a commentary on the book in the RENMIN RIBAO OVERSEAS EDITION on 23 February of this year. After reading professor Wang Ganchang's commentary on the book, a certain leader of the Ministry of Water Resources and Electric Power criticized the responsible person of RENMIN RIBAO for publishing Professor Wang's commentary. As a result, the scheduled publication of Professor Wang Ganchang's commentary in the domestic edition of RENMIN RIBAO was later canceled.

#### The Scientific Demonstration Is Not Complete

Thirdly, several experts have told me that at the scientific demonstration meeting held by the Ministry of Water Resources and Electric Power, they held that the scientific demonstration meeting should not only discuss the development plan of the Three Gorges Project on the Changjiang but should also discuss the development of the tributaries on the Changjiang and other relevant development plans. The meeting should also make a comparison between the development plan of the Three Gorges Project and other development plans of the same nature to see which plan is more practical, is capable of producing better economic results and quick benefits, requires less investment, and is made on scientific basis. In other words, those experts held that the meeting should scientifically compare the development plan of the Three Gorges Project with other development plans (to see if it is more practical to develop the tributaries in the upper reaches of the Changjiang than to develop the Three Gorges on the Changjiang). Nevertheless, the scientific demonstration meeting of the Ministry of Water Resources and Electric Power was not held in this way. The meeting held by the Ministry of Water Resources and Electric Power only discussed the question of the construction of the Three Gorges Project to decide whether to maintain the water level of the dam of the Three Gorges Project at 150 meters or at 185 meters. In other words, the meeting held by the Ministry of Water Resources and Electric Power only discussed the question of whether to build a 150-meter dam or build a 185-meter dam for the Three Gorges Project. This is quite ridiculous because the discussion on building either a 150-meter dam or a 185-meter dam for the Three Gorges Project was still centered on the Three Gorges Project only and nothing else. For example, if we

discuss whether the office cadres should wear western-style suits or not, we should first of all make a comparison between the western-style suits and the Chinese tunic suits or the suits of other styles to see their respective advantages and disadvantages before making a decision on whether we should wear the western-style suits or the Chinese tunic suits or the suits of other styles. We should not discuss whether we should wear the double-breasted western-style suits or the single-button-line western suits because both the double-breasted western style suits and the single-button-line western style suits are still the western style suits and nothing else. The scientific demonstration meeting held by the Ministry of Water Resources and demonstration meeting held by the Ministry of Water Resources and Electric Power was indeed held in such a ridiculous way. The State Council had asked the Ministry of Water Resources and Electric Power to discuss whether or not it is practical to carry out the construction of the Three Gorges Project on the Changjiang and whether or not it is practical to carry out the construction of the Three Gorges Project immediately or years later. However, what the meeting held by the Ministry of Water Resources and Electric Power actually discussed was whether to build a 150-meter dam or a 185-meter dam for the Three Gorges Project on the Changjiang. The reason given by the Ministry of Water Resources and Electric Power was: We want to "select a dam water level for the Three Gorges Project, which is acceptable to all sides so that we can concentrate on more detailed scientific demonstration of the feasibility of the Three Gorges Project" (Please refer to the written speech made by Qian Zhengying at the 7th CPPCC). Although Qian Zhengying also said: "The initial selection of a dam water level does not mean that the Three Gorges Project will be built. The dam water level initially decided upon will not necessarily be final water level. This is because after carrying out the in-depth scientific demonstration, we might probably revise the original plan." If this was the case, why didn't the meeting held by the Ministry of Water Resources and Electric Power compare the development plan of the Three Gorges Project with other development plans, such as the plan for the development of the tributaries in the upper reaches of the Changjiang? Why did the meeting held by the Ministry of Water Resources and Electric Power only discuss the question of whether to maintain the dam water level of the Three Gorges Project at 150 meters or at 185 meters and nothing else? Qian Zhengying said: "This is only the initial plan which will not necessarily be the final plan. It is quite possible that changes will be made in the initial plan later on." To allow changes in the initial plan does not mean to veto the Three Gorges Project but to determine a dam water level for the Three Gorges Project somewhere between 150 meters and 185 meters. From this, we can see that the construction of the Three Gorges Project has been the fixed policy of the Ministry of Water Resources and Electric Power. And even the holding of the scientific demonstration meeting could not change this fixed policy.

**Those Who Hold Different Views Are Discriminated Against**

Fourthly, some of my friends were invited to attend the scientific demonstration meeting held by the Ministry of Water Resources and Electric Power on the question of the Three Gorges Project. They told me that some experts and scholars of the Ministry of Water Resources and Electric Power did not agree to the development plan of the Three Gorges Project. They are very dissatisfied with their leaders who, according to these experts and scholars, have always deceived their superiors and deluded their subordinates, practised fraud, held back unpleasant information, suppressed democratic atmosphere within the Ministry of Water Resources and Electric Power. These experts and scholars are deeply concerned about the serious consequences of their leaders' malpractices. All those who hold different views on the question of the construction of the Three Gorges Project within the Ministry of Water Resources and Electric Power have either been discriminated against or removed from important positions. The leaders of the Ministry of Water Resources and Electric Power have also tried in every way to put pressure on those who hold different views on the question of the construction of the Three Gorges Project in order to prevent them from expressing their views in public. Several of my comrades were invited to attend the scientific demonstration meeting held by the Ministry of Water Resources and Electric Power last year. At the meeting, they disagreed with the building of the Three Gorges Project. However, when the report of the meeting was published, their names were listed as those who agreed to the building of the Three Gorges Project. The report failed to report the fact. In the report, it seemed that all the participants at the meeting had agreed to the immediate and fast construction of the Three Gorges Project. Later on, only when those comrades protested against such untrue reporting was the report revised. Here, I am not speaking irresponsibly because I have enough evidence to support what I say.

All in all, to build the Three Gorges Project is the fixed policy of the Ministry of Water Resources and Electric Power. This fixed policy has never been changed. And the preparations for the building of the project has never stopped, either. The Ministry of Water Resources and Electric Power has so far held several scientific demonstration meetings on the question of building the Three Gorges Project on the Changjiang. The purpose of holding such scientific dmonstration meetings is twofold: To cope with the public opinion and to report something to the higher authorities.

Many people who are ignorant of this fact have turned to thinking that the building of the Three Gorges Project has been suspended because some CPPCC members do not agree to it. This is a sheer misunderstanding. A lot of friends of mine have written to me saying that the building of the Three Gorges Project was suspended because I made a speech at the CPPCC in 1986 and saying that I have a done a very good thing for the

country. I do not deserve such honor because what they say is not true. In his "Work Report" addressed to the 7th CPPCC on 24 March of this year, Comrade Qian Xueshen said that "many of the views and proposals put forward in the CPPCC have been paid attention to by the party and government leading organs at the central level and by the deparments concerned. Some of these views and proposals have been accepted. For example, the investigation report on the economic rationality and technological feasibility of the key water control project at the Three Gorges has been paid attention to by the leading comrades of the State Council and the report is conducive to the work of scientific demonstration of the feasibility of the project." Some people might ask me why I should say that it is a sheer misunderstanding since Comrade Qian Xueshen has mentioned that. In fact, if we look at the "Work Report" made by Comrade Qian Xueshen in detail, we will find that what the leading comrades of the State Council have paid attention to is the views and proposals which "are conducive to the work of scientific demonstration of the feasibility of the project" and not the views and proposals which call for the suspension or cancellation of the construction of the Three Gorges Project.

**Zhou Peiyuan Shares My Views**

Many people often overestimate the role played by the CPPCC members. I clearly know my own limitations. In my speech addressed to the CPPCC in 1986, I said: "I clearly know that what I say cannot bring about any fundamental change because it is extremely difficult and even impossible to stop building a project that has been decided upon and is being built." "However, out of my own sense of responsibility for the country and people, I am willing to try to 'do what is impossible.' This is perhaps also the tradition of our old intellectuals." I have shared the same feelings with Comrade Zhou Peiyuan on the question of the Three Gorges Project. Comrade Zhou Peiyuan said: "The lesson we have learned from our past experiences tells us that we should not be overanxious for quick results. The department concerned should not subjectively think that it is right to build the project simply because it is a huge project of a super-world standard and because by building the project, the department concerned will become famous in the world. Haste makes waste and leads to just the opposite. I want to stress again that if the project is hastily built without going through sufficient scientific demonstration, there will be no end of trouble for the future and it will be too late for those involved to repent by that time." In the 1950's, Comrade Zhou Peiyuan "was once an activist advocating the building of the Three Gorges Project." However, later on, "after reading more materials and having acquired a clearer understanding of the project, especially after the Economic Constsruction Group of the CPPCC made detailed and practical investigations on the project, I changed my views and began to think that we must be cautious in making any decision on the construction of the project since it would affect the livelihood of the future generations of our nation." (Please refer to the Preface written by Zhou Peiyuan to

the book "On Macroscopic Decisionmaking Concerning the Three Gorges Project.")

The key to scientifically making decisions on the construction of the Three Gorges Project lies in whether the decision can be made in a democratic way or not, whether the departments concerned are willing to modestly listen to the differing views or not, and whether the departments concerned can encourage the free airing of views and thoughts or not. If the departments concerned continued to suppress the differing views, control the public opinion, deceive their superiors and delude their subordinates, then it would be better for the scientific demonstrations on the feasibility of the Three Gorges Project not to be held because the holding of such scientific demonstrations would only waste money and manpower. We are waiting to see what the departments concerned will do!

## PROVINCIAL

### 1987 Jiangsu Socio-Economic Development Statistics 40060267 Nanjing XINHUA RIBAO in Chinese 15 Mar 88 p 2

[Text] In 1987, under the leadership of the provincial CPC committee and the provincial government, the people of Jiangsu upheld the four cardinal principles, adhered to the policies of reform and opening up to the outside world, further widened the reforms, and launched an extensive movement to increase production and income and practice economy. As a result, the economy developed steadily, and new progresses were made in various fields of social development. According to initial statistics, the annual GNP reached 86.2 billion yuan (see note 1), a 13.8-percent increase over 1986; the national income was 75.3 billion yuan (see note 2), a 13.5-percent increase; revenues amounted to 10.71 billion yuan, a 7.5-percent increase; and exports totalled \$2.118 billion, a 23.2-percent rise. The market was brisk. New achievements were made in science, technology, culture, education, public health, and sports activities, and new progress was made in building a culturally and ideologically advanced society.

The major problems in the economy were demand outstripping supply, lack of momentum in agricultural development, unsatisfactory industrial performance, shortages of some commodities, and excessive price rises.

#### I. Agriculture

In 1987, rural reforms were intensified throughout the province; leadership was strengthened for agriculture; greater attention was paid to investment in agriculture; and continued improvements were made to various kinds of services. Despite serious natural disasters and shortage of agricultural means of production the rural economy developed steadily.

The total agricultural output value reached 25.508 billion yuan, a 3.1-percent increase over 1986. Of the total, the output value of crop farming was 16.25 billion yuan, a drop by 0.2 percent from 1986; and the output value of forestry, animal husbandry, sideline production, and fishery was 9.258 billion yuan, a 9.5-percent increase over 1986. The proportion of forestry, animal husbandry, sideline production, and fishery in the value of agricultural output as a whole increased from 34.2 percent in 1986 to 36.3 percent in 1987. Among major agricultural products, grain output dropped by 820,000 tons from 1986, but per-capita grain consumption remained above the 500 jin level. Cotton output rose again. The output of oil-bearing crops was an all-time high. Output of silkworm cocoons, tea, and other major industrial crops went up, and that of sugar-bearing crops, jute, ambari hemp, and cured tobacco went down.

The output of major agricultural products was as follows:

	1987 (tons)	Increase over 1986 (percent)
Grain	32,577,000	-2.5
Cotton	444,000	10.7
Oil-bearing crops	1,211,000	3.7
Of which, rapeseed	863,000	9.4
Sugar-bearing crops	297,000	-8.2
Jute, ambari hemp	28,000	-38.9
Cured tobacco	4,249	-13
Silkworm cocoons	83,000	3.8
Tea	12,000	17.1
Fruit	418,000	14.4

Forestry production continued to grow. The forestry output value was 306 million yuan, a 4.8-percent increase over 1986. A total of 466,300 mu of land was afforested, a 13.5-percent increase over 1986, and the quality of afforestation was improved. Output of major forest products went up.

The output value of the animal industry was 4.802 billion yuan, a 1.2-percent increase over 1986. But hog production dropped. The number of hogs slaughtered, pork output, and the number of hogs at year's end all fell. The output of beef, mutton, poultry, and eggs went up. The number of large animals at year's end went down.

The output of major animal by-products and livestock headage were as follows:

	1987	Increase over 1986 (percent)
Pork	1,294,000 tons	-4.7
Beef and Mutton	55,000 tons	34.1
Hogs slaughtered	20,192,000 head	-6.6
Large animals at year's end	857,000 head	-2.1
Hogs at year's end	17,433,000 head	-9.5
Sheep at year's end	6,403,000 head	27.5

Fishery kept up its high development rate. The total output of aquatic products was 921,900 tons, a 14.6-percent increase over 1986. Freshwater products totaled 642,100 tons, an 18.7-percent increase, and marine

products totaled 279,800 tons, a 6.1-percent increase. The output value of sideline production was 3,001 billion yuan, a 27.3-percent increase.

Conditions for agricultural production continued to improve. By the end of 1987, the aggregate power used by the province's farm machinery reached 19,744,100 kw, a 9-percent increase over 1986. There were 19,400 large and medium-sized tractors, a 3.7-percent increase; 604,600 small tractors, a 12.3-percent increase; and 15,800 trucks for agricultural use, a 20.6-percent increase. The power used by irrigation and drainage equipment was 4,689,700 kw, about the same as in 1986. A total of 1,780,200 tons of chemical fertilizers were applied, a 4.9-percent increase. The total consumption of electricity in rural areas was 8,523 billion kwh, a 19.7-percent increase.

The rural production structure was further readjusted, and the rural economy continued to grow. The total social output value in rural areas was 104.650 billion yuan (see note 3), a 21.8-percent increase over 1986. Nonagricultural output, including that of rural industry, construction, transport, and commerce, maintained a fairly high growth rate. The 1987 nonagricultural output value totaled 79.050 billion yuan, a 29.2-percent increase over 1986. The output value of rural industry was up by 32.3 percent, construction by 16 percent, transport by 19.4 percent, and commerce by 19.3 percent. The proportion of nonagricultural output in the total rural output value rose from 71.2 percent in 1986 to 75.6 percent in 1987.

The problems in the rural economy were the lack of momentum in agricultural production and shortages of some agricultural and sideline products and related commodities.

## II. Industry

In 1987, efforts were made to overcome shortages of funds, energy, and raw and semifinished materials, launch the movement to increase production and income and practice economy, readjust the product mix, and produce more readily marketable goods. As a result, industrial production rose steadily.

The total industrial output value for the year reached 149.951 billion yuan, a 23.8-percent increase over 1986. If the output value of village industries was excluded, the total industrial output value became 119.323 billion yuan, still 21.4 percent more than in 1986. The output value of state-owned industrial enterprises was 52.096 billion yuan, up 14.1 percent; that of collectively owned industrial enterprises was 63.160 billion yuan, up 26 percent; that of various types of jointly owned enterprises was 3.720 billion yuan, up 60.4 percent; and that of cooperative enterprises and individually owned enterprises in urban areas was 347 million yuan, up 41 percent.

Light and heavy industries grew at comparable rates. The 1987 total output value of light industry 67,333

billion yuan, 20 percent more than in 1986, and that of heavy industry was 51.990 billion yuan, up 23.1 percent.

The structure of industrial production was further readjusted. The development of energy, raw and semifinished materials industries and such new industries as machinery, electronic, fine chemical, and chemical fiber industries was accelerated. Production of readily marketable consumer goods grew steadily. Production of chemical fertilizers, insecticides, and other products for agriculture went up.

### The output of major industrial products was as follows:

	1987	Increase over 1986 (percent)
Cotton yarn	600,700 tons	11.3
Cloth	2,552,000,000 meters	6.9
Woolen fabrics	57,212,000 meters	2.7
Silk fabrics	384,000,000 meters	6.4
Knitting wool	52,700 tons	99.6
Machine-made paper and paper board	651,100 tons	8.2
Sugar	1,228 tons	-53.9
Cigarettes	1,011,000 cases	3.4
Synthetic detergent	105,700 tons	3.4
Household washing machines	373,900	-24.5
Household refrigerators	388,800	56.5
Electric fans	6,179,000	11.1
Bicycles	4,775,700	14
Sewing machines	946,500	14.4
TV sets	3,418,700	19.9
of which, color sets	591,500	95.9
Tape recorders	4,171,900	15
Cameras	417,400	14.4
Coal	22,350,800 tons	2.8
Electricity	30,249,000,000 kwh	14.7
Crude oil processing	6,698,800 tons	23.1
Steel	1,340,700 tons	17.3
Pig iron	1,369,600 tons	19.1
Rolled steel	1,897,900 tons	13.3
Cement	15,244,700 tons	14.7
Plate glass	2,890,900 standard boxes	-5.1
Sulphuric acid	895,300 tons	20.6
Soda ash	54,800 tons	75.1
Caustic soda	280,800 tons	11.2
Power generating equipment	286,000 kw	56.3
Metal-cutting machine tools	18,900	7.9
Motor vehicles	32,100	36.0
Large and medium- sized tractors	343	98.3
Small tractors	153,700	54.5
Chemical fertilizers	1,427,600 tons	16.6
Chemical insecticides	39,600 tons	0.3

Rural industries in Jiangsu continued to grow at a fairly rapid rate. The output value of rural industries was 65,643 billion yuan in 1987 (including the output value

of village industries, which came to 30.628 billion yuan, up 34.6 percent), up 32.3 percent from 1986, and its proportion in the total industrial output value of the province as a whole increased from 41 percent in 1986 to 43.8 percent in 1987.

Many indicators of industrial performance showed considerable improvement. Profits and taxes of state-owned industrial enterprises totalled 5.313 billion yuan, up 15.57 percent from 1986, faster than the growth rate of their total output value. The turnover period for working funds was shortened from 94.59 days in 1986 to 90.17 days in 1987. Per-capita productivity increased by 9.45 percent. The product quality improvement rate increased from 76.5 percent in 1986 to 81.5 percent in 1987. The proportion of products with reduced material consumption increased from 59.8 percent in 1986 to 62 percent in 1987. Energy consumption dropped, and industrial departments saved 923,600 tons of energy, raising the energy saving rate to 3.51 percent. There were fewer losing enterprises, and their losses dropped by 12 percent.

Industrial reforms continued to develop. By the end of 1987, 91.8 percent of the industrial enterprises in the province had instituted various forms of contract management responsibility system, and 200 small industrial enterprises had been leased or contracted to individuals on a trial basis. Industrial reforms were increasingly focused on the management within enterprises. Among state-owned enterprises, 65 percent had introduced the director responsibility system, and most of them had adopted a tenure system for factory directors. No less than 80 percent of the industrial enterprises in Jiangsu had adopted a floating wage system, and 90 percent of workers and staff members were receiving floating wages. Lateral economic associations continued to grow. The number of laterally associated organizations made up chiefly of industrial enterprise at and above the county level reached 350, involving investments of 1.462 billion yuan. The output value and profits of these associated organizations were considerably higher than in 1986.

Vigorous efforts were made to achieve the goals of technological transformation set by the Seventh 5-Year Plan, resulting in higher technical and managerial standards and greater ability to develop new products. According to incomplete statistics, 6,000 new products were developed, of which 20 won national gold and silver medals and 600 won provincial quality awards, and the quality product rate rose to 14.28 percent.

The major problems in industrial development were unsatisfactory overall economic performance, uneven development among trades, contradiction between the structure of production and market demand, and rising costs of comparable products.

### III. Investment in Fixed Assets and Construction

In 1987, serious efforts were made to implement the principle of supporting productive or key projects and planned investment while curbing nonproductive or

unimportant projects and investment outside of the plan in order to control the scale of investment in fixed assets. A total of 919 construction projects were to be stopped, postponed, or reduced in scale to cut down investment by 830 million yuan, of which 216 were stopped or postponed in 1987, reducing investment by 170 million yuan for the year. In 1987, investment in fixed assets totaled 15.04 billion yuan, 27.5-percent more than in 1986. This was smaller than the growth rate of 1986. Of the total, 12.2 billion yuan went to state-owned units, up 29.5 percent, and 2.8 billion yuan went to collectively owned units in urban areas, up 18.7 percent.

The investment structure was further improved. In state-owned units, investment in capital construction totaled 7.9 billion yuan, up 30.6 percent from 1986. Of the total, 5.7 billion yuan was invested in productive projects, a 49.8-percent rise from 1986, and the proportion of investment in productive projects rose from 63.2 percent in 1986 to 72.6 percent in 1987; and 2.2 billion yuan was invested in nonproductive projects, about the same as in 1986, but the proportion of investment in nonproductive projects dropped from 36.8 percent in 1986 to 27.4 percent in 1987. Of the investment in nonproductive projects, 920 million yuan was invested in housing construction, a drop by 9.3 percent from 1986. Of the total investment in capital construction, 1.68 billion yuan went into energy industrial departments, up 70.8 percent from 1986; 1.13 billion yuan went into transportation and communications departments, up 21.6 percent; 670 million yuan went into light and textile industrial departments, up 24.3 percent; and 380 million yuan went into cultural, educational, and public health departments, up 8 percent. The proportion of investment in energy, transportation, and communications industries rose from 31.6 percent in 1986 to 35.6 percent in 1987.

Construction of key projects was stepped up. In 1987, 4.49 billion yuan was invested in 44 large and medium-sized capital-construction projects in the province, up 52.8 percent from 1986, and their proportion in total capital-construction investment rose from 48.6 percent in 1986 to 56.9 percent in 1987. Of that sum, 3.6 billion yuan was put into 14 key projects organized by the state and given reasonable construction schedules, up 54 percent from 1986. Of the large and medium-sized projects under construction, six were completed and put into operation in 1987. They were: the Plant 924, the 5th phase construction of the Jianbi Power Station, the 3d phase construction of the Xuzhou Power Station, the Jiangnan Cement Plant, the Cishan mine, the Nantong Insecticide Plant, and the Tongshan Cement Plant. Seven other projects were put into partial operation. Newly added production capacities include: 900,000 tons of coal, 250,000 tons of cement, 600,000 kw of power generating capacity, 920,000 kva of power-transforming equipment, 244 km of power transmission and transforming lines, 1.4 million tons of port cargo handling capacity, 60,000 tons of synthetic fiber, 800,000 tons of petroleum cracking capacity, 900,000 tons of limestone, and 3,000 tons of insecticide.

Technological transformation of enterprises advanced steadily. State-owned units invested 4.34 billion yuan in updating equipment, up 27.5 percent from 1986. Of this amount, 1.94 billion yuan was used for increasing production, up 47.5 percent; 480 million yuan for increasing the variety of products, up 5.8 percent; 310 million yuan for improving product quality, up 35.2 percent; and 130 million yuan for reducing energy consumption, down 26.1 percent. Through technological transformation, some enterprises have gained momentum for growth and competitiveness.

In 1987, a total of 4,448 fixed assets investment projects for state-owned units were completed and put into operation, including 1,543 capital-construction projects, 47.5 percent of the total number under construction, and 2,905 re-equipment and transformation projects, 58.9 percent of the total number under way. A total of 8.05 billion yuan worth of fixed assets were added, a 12.7-percent increase over 1986, including 4.56 billion yuan worth of capital construction, up 10.9 percent, and 3.49 billion yuan worth of new equipment, up 15.2 percent.

The major problems in investment in fixed assets were the scale of investment was still too great, too many new projects still got started, and a fairly large proportion of investment was unplanned and not subject to assessment.

Reforms in the building industry progressed step by step. The contract responsibility system was applied to 2,668 projects undertaken by state-owned construction enterprises, which covered a construction area of 3.82 million square meters, or 68.9 percent of the total construction area in the province. Of these, 608 projects, covering a construction area of 1.74 million square meters, or 31.3 percent of the total, were contracted through bidding. The contracted construction projects produced marked results in shortening the construction period, reducing costs, and improving work quality and economic returns. In 1987, the output value of state-owned construction enterprises totaled 1.44 billion yuan, up 14.3 percent from 1986; the per-capita productivity was 9,580 yuan, up 5.1 percent; and the rate of quality work in terms of finished construction area was 78 percent, 1.8 percent higher than in 1986.

#### IV. Transport, Post, and Telecommunications

More reforms were implemented in the transport industry, and re-equipment and transformation projects were carried out to tap potential capacities. Progress was made in the volume of passengers and freight handled by various means of transportation.

In 1987, transportation departments handled 46.16 billion ton/km of goods, up 3 percent from 1986. Of this, the railways handled 27.12 billion ton/km, up 4 percent; trucks handled 2.22 billion ton/km, up 4.2 percent; and

ships and boats handled 16.82 billion ton/km, up 1.3 percent. The volume of cargo handled at local ports was 73.47 million tons, up 4.8 percent.

The volume of passenger transportation was 30.3 billion person/km, up 8.6 percent from 1986. Of this, the railways carried 12.94 billion person/km, up 10 percent. The volume of road passenger transportation was 16.64 billion person/km, up 8.5 percent. The volume of waterway passenger transportation was 720 million person/km, down 10.9 percent.

The postal and telecommunications services continued to develop. Business transacted by postal and telecommunications departments totaled 280 million yuan, up 23.1 percent from 1986. The number of letters handled increased by 13.2 percent; newspapers and magazines distributed rose 6.2 percent; the number of telegrams rose 23.6 percent; and long-distance telephone calls rose 21 percent. The number of telephone subscribers in urban areas totaled 164,000, up 16.1 percent from 1986. All the 11 cities in the province have opened domestic express mail service.

The strains on the postal and telecommunications services in recent years were eased somewhat, but the services still could not meet the requirements of economic development.

#### V. Domestic Commerce, Supply and Marketing

Growing production and reforms in the circulating system brought increasing prosperity to urban and rural markets.

In 1987, the total value of commodities purchased by state-owned commercial departments and supply and marketing cooperatives was 42.737 billion yuan, a 21.7-percent increase over 1986. Of this, the value of manufactured goods purchased increased by 29.1 percent, and that of agricultural and sideline products increased by 3.5 percent. There were increased supplies of manufactured goods which were in great demand.

The value of retail sales totaled 42.2 billion yuan, an 18.6-percent increase over 1986. In real terms the increase was 8.5 percent. Of the total retail sales, the value of consumer goods bought by the people was 32.21 billion yuan, up 18.9 percent; that of consumer goods bought by social groups was 3.86 billion yuan, up 14.3 percent; and that of agricultural means of production was 6.13 billion yuan, up 19.8 percent.

The retail sales of all commodities increased since 1986. Retail sales in the state-owned sector grew by 15.2 percent; in the collective sector, by 17.5 percent; in the jointly public-and-private-owned sector, by 75 percent; and in the individual sector, by 27 percent. And a 30.2-percent rise was registered in transactions between peasants and nonagricultural people.

Retail sales of all consumer goods were on the rise. Food sales increased by 20.7 percent; clothes by 21.3 percent; and necessities by 15.4 percent. Sharp increases were registered in sales of durable consumer goods such as television sets, up 19 percent; electric fans, up 23.3 percent; washing machines, up 44.3 percent; and refrigerators, up 71.9 percent.

New progresses were made in the structural reform of commerce. By the end of 1987, the provincial commerce department had leased 681 small commercial enterprises to individuals; 335 large and medium-sized commercial enterprises, 59 percent of the total, had implemented the contract management responsibility system; and 47 industrial products trade centers and a number of wholesale markets and trade warehouses were established. The number of urban and rural fairs increased from 4,856 in 1986 to 5,019 in 1987. Their business volume amounted to 6.79 billion yuan, a 35.5-percent increase over 1986.

Prices rose considerably. The retail price index rose an average 9.3 percent in the province. The retail price index rose 10.8 percent in urban areas and 8 percent in rural areas. The price of foodstuffs went up 12.8 percent; that of aquatic products rose 27.5 percent; that of fresh vegetables rose 22.4 percent; and that of meat, poultry, and eggs rose 20.2 percent. The cost of clothes rose by 5.3 percent (pure wool rose 28 percent); household goods, 5.4 percent; medicine and medical apparatus, 6.7 percent; fuel, 1.7 percent; and agricultural means of production, 9.4 percent, of which chemical fertilizers rose 6.9 percent and insecticide rose 14.7 percent.

The cost of living index went up 9.2 percent in 1987. The rise was 10.5 percent in urban areas and 7.7 percent in rural areas.

The general purchase price level of agricultural and sideline products rose by 10.9 percent in 1987. The producer prices of more industrial products also went up.

With reforms in the commodity control system, the scope of market regulation of capital goods expanded, entailing a drop in the proportion of materials distributed according to state plan. The sales volume of the materials and capital goods departments was 19.28 billion yuan, up 51.67 percent from 1986. Of this, the volume handled by capital goods trade centers was 3.76 billion yuan, up 121.2 percent from 1986.

Cooperation in commodity supplies was strengthened. In 1987, commodities brought in the province under cooperative arrangements totaled 7.487 billion yuan, up 59.3 percent from 1986. To varying degrees, all major commodities brought in under such arrangements went up.

The main problems in the domestic market were shortages of some foodstuffs and manufactured household goods, imbalance between supply and demand for agricultural means of production, and excessive price rises which had lowered the living standard of some urban residents.

#### VI. Foreign Trade and Tourism

Exports increased considerably. Jiangsu's foreign trade in 1987 was worth \$2.702 billion, a 29.8-percent increase over 1986. Exports totaled \$2.118 billion, up 23.2 percent. Imports totaled \$584 million, up 61.4 percent.

More foreign capital was used. In 1987, the province absorbed \$208 million in foreign capital, 13.9 percent more than in 1986. This included \$82.38 million in loans and 46.51 million in direct foreign investment. At year's end, there were 197 Chinese-foreign cooperative and joint ventures in the province, 76 more than in 1986, and 98 were completed and put into operation, 50 more than in 1986.

Economic and technical cooperation with foreign countries continued to develop. Contracts for overseas projects and labor service fulfilled in 1987 were worth \$37.94 million, 16.7 percent more than in 1986.

The tourist industry continued to grow. In 1987, the province attracted 550,000 tourists and visitors, 9.8 percent more than in 1986. They included 389,000 foreigners and 161,000 overseas Chinese and compatriots from Hong Kong, Macao, and Taiwan. Foreign exchange earned through tourism during the year amounted to \$63.12 million, 33.4 percent more than in 1986.

#### VII. Finance, Banking, and Insurance

The financial policy of increasing revenues and reducing expenditures paid off. In 1987, the localities strived to broaden sources of income and reduce expenditures by launching the movement to increase production and income and practice economy. As a result, revenues increased, and expenditures were kept under control. The province's revenues totaled 10.71 billion yuan, a 7.5-percent increase over 1986. Expenditures totaled 6.79 billion yuan, a 2.7-percent increase. The number of counties (cities and suburbs) with revenues over the 100-million-yuan mark increased from 14 in 1986 to 17 in 1987, and the financial conditions of 13 counties which relied on state subsidies were improved.

Governments at all levels paid attention to the regulatory role of banking in macroeconomic control, continued the reform of the banking system, and further expanded the banking business. Both deposits and loans were on the rise. In 1987, transactions in the short-term money markets totaled 38.6 billion yuan, and the province borrowed a net amount of 2.8 billion yuan from

other provinces. Deposits in banks and credit cooperatives increased by 19.3 percent, and loans extended by them increased by 19.6 percent.

The insurance industry continued to grow. The types of insurance increased from 100 in 1986 to 120 in 1987. The total amount of domestic insurance underwritten (not including personal insurance) was 146.6 billion yuan, a 32-percent increase over 1986, and that of foreign insurance was \$2.535 billion, a 17.3-percent rise. The domestic insurance funds accumulated had a powerful impact on local construction. The insurance industry provided 400 million yuan for 1,400 projects in the province in 1987.

### VIII. Science, Technology, Education, and Culture

The structural reform of science and technology continued, and scientific research produced impressive results. In 1987, of 1,061 scientific and technological advances entered, 364 won provincial awards including 2 first-class awards, 27 second-class awards, 117 third-class awards, and 218 fourth-class awards.

The ranks of scientists and technicians continued to expand. In 1987, a total of 375,700 natural scientists and technicians were employed by local state units, 35,400 more than in 1986.

Education developed in the course of reform. In 1987, institutions of higher learning enrolled 2,850 graduate students, bringing the total number of graduate students to 8,552, an increase by 1,326 from 1986. Universities and colleges enrolled 44,200 students in 1987, and the total student body was 140,200, an increase by 7,500 over 1986.

The structure of secondary education was further readjusted. In 1987, there were 335 agricultural middle schools in the province, 26 more than in 1986, enrolling 160,500 students, 12,500 more than in 1986. Enrollment in secondary technical schools and skilled workers schools also increased. The enrollment ratio between secondary vocational schools (including secondary technical schools, skilled workers schools, and senior agricultural middle schools) and regular senior middle schools was readjusted from 1:1.6 in 1986 to 1:1.5 in 1987.

There were 6,534,800 students in primary schools. The attendance rate of school-aged children rose from 98.38 percent in 1986 to 98.76 percent in 1987.

Adult education continued to enjoy wide support. In 1987, institutions of adult higher education had a total enrollment of 78,200, and adult vocational and technical schools had a total enrollment of 95,700.

Cultural activities flourished. There were 5,136 cinemas and film projection teams, 140 performing art troupes, 109 cultural centers, 2,300 cultural stations, 91 public libraries, 37 museums, and 11 publishing houses. In

addition, there were 15 broadcasting stations, 14 radio transmitting and relay stations, and 19 television stations. Some 285 million copies of books, 63.9 million copies of magazines, and 1.007 billion copies of newspapers were published in 1987.

### IX. Public Health, Sports, and Environmental Protection

Public health and medical services continued to improve. At the end of 1987, there were 11,934 public health organizations in the province, 191 more than in 1986. They included 2,482 hospitals, 12 more than in 1986. There were 153,800 sickbeds, 6,700 more than in 1986, of which 135,900 were hospital beds, 5,200 more than in 1986. Professional health workers numbered 191,800, up 1.5 percent from 1986. The total included 78,400 doctors, 38,900 nurses, and 74,500 other health workers.

Progress was made in disease prevention. There were 226 epidemic prevention stations and specialized disease prevention and control institutions in the province. Full-time epidemic prevention workers numbered 9,071, up 4.1 percent from 1986.

Progress was also made in sports. In 1987, three athletes from Jiangsu won three championships in major international tournaments. In top-level national competitions, Jiangsu won 22 gold, 33 silver, and 45 bronze medals, of which 9 gold, 15 silver, and 16 bronze medals were won at the 6th National Games. A total of 6,518,800 students in schools of various kinds at various levels met the national physical training standards. They accounted for 90.7 percent of those who took the tests, a higher percentage than in 1986.

New progress was made in environmental protection. A total of 170 million yuan was invested in 1,800 pollution control projects in 1987. The capacity for waste water treatment was increased by 250,000 tons per day. Progress was also made in controlling new sources of pollution. Environmental protection work in town and township enterprises was strengthened.

### X. Living Standards

People's income in urban areas remained basically stable, with most families earning more than before. A sample survey of more than 2,300 urban families in 31 counties and cities showed an average annual per-capita income of 1,005 yuan in 1987, an increase of 94 yuan or 10.3 percent over 1986, and per-capita living expenses of 952.3 yuan, an increase of 85.9 yuan over 1986. The income rise for urban employees of different status was not balanced, and the real income of some urban families dropped somewhat because of price rises.

Peasants' income continued to increase. A sample survey of 3,400 peasant families in 34 counties showed an average annual per-capita net income of 626.5 yuan in

1987, an increase of 65.2 yuan or 11.6 percent over 1986. The increase was 3.7 percent in real terms. The per-capita net income of 2.18 percent of peasant families was still below 200 yuan.

With the reform of the employment system, more people found jobs. In 1987, 169,300 people found jobs in urban areas. There were 8,452,600 employees in the province at year's end, 292,600 more than at the end of 1986. Of them, 548,300 were contract workers for state-owned units, 118,700 more than in 1986. Self-employed workers in urban areas totaled 145,000, 28,400 more than in 1986.

Savings deposits increased sharply in urban and rural areas. At year's end, individuals' bank savings totaled 19.369 billion yuan, an increase of 5.410 billion yuan or 38.8 percent over 1986. Of the total, 11.86 billion yuan was deposited by people in urban areas, up 44.9 percent, and 7.509 billion yuan by people in rural areas, up 30.1 percent.

Housing improved for both urban and rural residents. In 1987, 3,879,800 square meters of housing floor space were built by state-owned units, and housing construction was on the rise in rural areas. A sample survey at year's end showed a per-capita housing space of 18.6 square meters in rural areas, 1.1 square meters more than at the end of 1986. The per-capita housing space also increased for urban families.

Social welfare services continued to improve. New progress was made in expanding homes for the old and disabled. Urban and rural collectives stepped up the work to provide for the widowed, elderly, disabled, and orphans. Impoverished families in urban and rural areas found relief and support.

## XI. Population

At the end of 1987, there were 63.48 million people in Jiangsu Province, 781,100 more than at the end of 1986. The birth rate rose from 13.2 per thousand in 1986 to 15.42 per thousand in 1987; the mortality rate dropped from 5.8 per thousand to 5.79 per thousand; and the natural growth rate rose from 7.4 per thousand to 9.63 per thousand.

Note: The gross national product and national income listed here are calculated in terms of 1987 prices, and the rates of growth are calculated according to comparable prices. The gross industrial and agricultural output values are calculated in terms of 1980 constant prices.

1. Gross national product refers to the increased value of both the material productive and nonproductive sectors, not including the value of products and labor service consumed by intermediate units.

2. National income is the sum of the net output value (total output value minus the value of materials consumed) of industry, agriculture, the building industry, communications and transportation, and commerce (including the catering trade and the supply and marketing of materials and equipment), the five material-producing departments.

3. The total social output value in rural areas (calculated in terms of constant prices) includes the total output value of agriculture and of collectively and privately owned rural industries, construction, transport, and commerce.

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## FINANCE, BANKING

### Monetary Policy, Macroeconomic Control Measures

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[Article by Chen Yaoxian [7155 5069 0341], Examiner and Statistician, People's Bank of China: "Monetary Policy and the Choice of Macroeconomic Control Measures"]

[Text]

### I.

Monetary policy, as an overall financial control measure, is an important aspect of macroeconomic control. Easing or tightening the money supply has a major impact on the supply-demand relationship as well as on the workings of the economic system. This is especially true in a planned commodity economy. Economic reform has reduced the scope of administrative controls, and enhanced the role and impact of banks in the system of macroeconomic adjustments, and as a result, monetary policy plays a even more significant part in balancing the economy at the macro-level. However, in recent years, it has become apparent that financial macroeconomic control has failed to effectively integrate economic development and monetary stability. When economic growth fluctuates, and we need to take monetary and credit measures to make adjustments, we either adopt indiscriminate and sweeping measures, or we issue more money, and as a result, the financial macroeconomic control measures seldom achieve the anticipated results. In 1984, because of the over-expansion in fixed asset investments and consumption funds, the quantity of money increased by as much as 49.5 percent, and the money supply (money plus quasi-money) grew 34.8 percent, and we lost control of the money and the credit volume. In 1985, a tight credit policy was adopted. At that time, despite the emphasis on "selective support and differentiated treatment," the economic system's "soft" restraint on enterprises and our less than perfect

financial adjustment and control mechanisms made it impossible to circumvent the sweeping measures, and consequently, we lent money to projects which did not deserve it, and failed to support those which did. In the early part of 1986, the economy began to show signs of a depression, which caused many to panic. All sides clamored for more circulating funds, and urged the government to adopt a "steady but lenient" credit policy. Money and credit exceeded by far the original planned amounts. The figures were startling. By 1987, although a "tight but flexible" policy was promoted, most specialized banks preferred to stress "flexibility," and overlooked "tightness." Industrial loans and loans to township enterprises increased by leaps and bounds, and industrial growth continued to surpass the planned rate. Township enterprises grew by more than 40 percent. In order to keep the monetary and credit plans within bounds, since September, practically all of the central bank's control measures have been put into effect, they include raising the specialized banks' reserve requirement, raising the central bank's discount rate on loans to the specialized banks, forcing the credit cooperatives to deposit money in the central bank, limiting township enterprise loans, and ordering a mandatory cutback of the loan scale to the June level. To a certain extent, these measures have eased the demand for money and credit, and kept the amount of money and credit in 1987 within the limits authorized by the State Council. However, from the point of equilibrium of supply and demand in society, the disparity has lingered, and the problem has not been resolved. In truth, long-term problems cannot be solved by short-term tightening of credit.

In analyzing the money situation in recent years, the trend of monetary and economic growth since 1984 has pointed to an over-heated economy accompanied by an excess money and credit supply, which in turn has pushed prices upward. Clearly these factors already have undermined the stability of the economy and the smooth implementation of reforms. Some comrades feel that even though too much currency has been issued in recent years, it has not produced any dangerous effects. This, however, is because a large part of the surge in demand for money since 1984 has been offset by the increase in imports, which has alleviated the inflationary pressure. In the future, when importing ceases to be a factor, inflation will be the certain and direct result. Although product price reform was not directly implemented in 1987, price fluctuation has already become a pressing problem in our economic life.

## II.

Why have the banks failed to use monetary policy and control measures to integrate economic development and monetary stability? This is due partly to the banks' own adjustment mechanisms, but basically it can be attributed to the economic system itself. First, we are in the process of making quantitative adjustments in a semi-pecuniary system (or we are phasing-in a pecuniary system,) and if we fail to change enterprises' "soft"

budgetary controls, we cannot prevent enterprises from increasing their demand for money, and then no monetary policy can make the financial control measures flexible enough to be effective. Second, at present our macroeconomic functions are still controlled by the developmental mode of the product economy. Supporting economic growth has always been the number one goal of our monetary policies, and inevitably the simplistic emphasis on the allocation of credits only leads to a high rate of increase in currency issuance, and the economic problems brought by the surge in money and credit supply are often overlooked.

From the point of the financial control mechanisms, no doubt there are imperfections in the development of China's financial market, and the specialized banks have not made substantial changes to operate more like enterprises. As a result, the central banks' macroeconomic control has not made any impact through the market or the commercial banks. In many ways the central bank's manipulation of the present monetary policy is in urgent need of improvements:

First, the central bank does not have a clear intermediate-term monetary control objective, or at least we can say that the objective is constrained by administrative control measures, and therefore has very little meaning. As a result, the money supply inevitably fluctuates with the rate of economic growth, and economic decisions become transient and arbitrary. Making economic decisions is like walking a tightrope: Never look beyond the next step. When things look bad, we tighten control, and when things improve slightly, we quickly swing the other way. This condition does not promote steady economic growth, especially in a developing country like ours. In an economy suffering from the short-term effects of constant fluctuations, the central bank's lack of a steady monetary goal only exacerbates the problems.

Second, our existing method of observing and analyzing economic and financial changes is incorrect, and often leads to the wrong conclusion about our economic and financial development. In assessing the changes in the economic and financial trend, we have the habit of looking at the absolute changes in the various economic indicators, or comparing the current year's growth rate with the previous year's. But as far as analyses are concerned, macroeconomics is very complicated. Each cycle is the result of both human and policy factors, as well as interventions by the central bank, seasonal fluctuations, and other elements. They are not just simple notions of mathematical averages. If an economic trend is concealed by seasonal fluctuations, an analysis can come to a wrong conclusion. For instance, during the first half of last year, 8.3 billion yuan of cash was withdrawn from circulation. Superficial observation would indicate that as currency was being withdrawn, there should be less cash in circulation. But if we discard the seasonal factor, and analyze it in terms of a normal year, at the end of June,  $M_0$ , the amount of currency in circulation, has increased 27.8 percent compared to the

same period in the previous year, which even exceeded by 4.5 percent the 23.3 percent increase at the end of 1986, just 6 months earlier. Therefore, in evaluating the currency situation during the first 6 months of the year, we cannot simply assume that the withdrawal of 8.3 billion yuan from circulation was a good thing. We must realize at the same time that the real increase in the money supply is still substantial. As another example, the direct consequence of the adoption of tight measures in April, 1985 was the slow down in the expansion of the credit volume. However, up to July of that year, the GIOV was more than 20 percent higher than for the same period in 1984. Between August and October, the GIOV still averaged 15 percent higher. This growth rate was quickly reflected in the economy. Prices for raw and processed materials rose, which pushed costs up sharply. Comparable costs were 7.5 percent higher in 1985, and the cost of production for the nation's industrial enterprises rose 19.6 percent, and yet there was no urgent demand for credit. But, in February, 1986, industries began to slide, and the growth rate fell to 0.9 percent compared to the previous year, and prices for capital goods stabilized; however, circulating funds were in acute short supply. Yet, we failed to realize that the "slide" in early 1986 had happened in an economy which had not yet cooled off, and had actually been the result of the accelerated growth in the previous year. Instead, we erroneously attributed it to the tight credit policy, and continued to ease up on the money supply. As a result, the year's credit volume was raised to a new level. No doubt this was one of the major factors which forced the economy to adopt a two-pronged tight policy this year.

### III.

This year, we should further stabilize the economy and implement more thorough reforms; and, therefore, it is indeed correct that we tighten both our financial and credit policies to stabilize the currency and the product prices. However, years of experience have taught us that if we do not take effective macroeconomic control measures, and rely only on short-term tight measures, the impact on economic stability and thorough reform will be minimal.

Reform is the only way to solve the problem of stability and economic growth. The essence of reform must embody the characteristics of a planned commodity economy, and we want to create the proper conditions to make a step by step transition from relying on state administrative measures to adopting more indirect management methods instead. We must overhaul the present practice of allowing the money supply and credit volume to expand as the economy expands, because it causes product prices to rise, and makes further development and reform much more difficult.

In implementing comprehensive macroeconomic control measures, we should consider the important role money plays in the overall economic development and

reform process, and select a proper intermediate- to long-term stable monetary policy goal, and use the money supply as a means to control the economy at the macro-level. By controlling the volume of money supply, we can stabilize the currency and the product prices, and take a further step to creating a better economic environment for implementing reform, opening up the economy, and achieving steady and balanced development. Only under these conditions can we promote economic growth.

First, the central bank has the ability to control currency and curb the excess demand at the macroeconomic level. Facts in recent years prove that the central bank has sufficient capital to make an impact on the specialized banks' total loan volume, influence the money supply, prevent the economy from overheating, and stave off the "investment cravings." The question is whether this indirect measure is desirable. The central bank's currency reserve is the source of its loan funds. There is an intimate relationship between the currency reserve and the money supply (cash plus bank deposits), between the central bank's loan funds and the specialized banks' total loan funds, and between the specialized bank's total loan funds and the money supply. Calculations based on data collected in recent years indicate that each yuan of the central bank's currency reserve generates 2.0 to 2.5 yuan in total money supply ( $M_2$ ), and each yuan the central bank lends out creates 2.6 to 3.0 yuan in total loan funds made available through the specialized banks, and each yuan of loan fund creates 0.80 to 0.85 yuan of  $M_2$ . Thus, if we use the central bank's loan funds in a planned and deliberate way, we can manage the money supply properly, and in turn, manage product prices, and then we can also stabilize the economy, and provide a comfortable environment for reforms.

Second, we must set a limit to the money supply, and allow the economy to develop within this limit. In essence, we want to use the money supply to keep the economy from overheating, and curb the tendency to take short-term measures to pump up the economy. The upper limit to the money supply should be based on a reasonable rate of economic growth plus the planned increase in product prices, and we can also take into consideration the velocity of circulation of money within the period. Once we have determined the rate of increase in the money supply, it should be taken as a mandatory index. Only in this way can we guarantee that we stay within our financial means, and act according to our ability. When the economy overheats, we do not increase the money supply in response to the accelerated economic growth, but instead allow the economy to resume a reasonable growth rate gradually. When the economy stalls, we do not decrease the money supply, but allow the economy to recover within the limits of the existing money supply. This will allow the economy to develop at a steadier pace. As long as the money supply remains within bounds, changes in the economic cycle are only structural and will not have a major impact on the overall economy.

Third, the objective of the central bank's monetary policy is to stabilize the economy and stabilize prices. Its main control measures are based on the multiplier effect between the central bank's supply of loan funds and the total money supply. The bank should make full use of the currency reserve at hand, and manipulate financial market operations to make adjustments according to the conditions in the economy at different times.

In choosing any of the above measures, the following conditions must be met: one, the central bank, to a great extent, must be autonomous so that it can implement selectively the correct measures to fulfill its monetary policy goals and resist any administrative order which deviates from its policy goals. Two, the central bank must be allowed to concentrate on the macroeconomic rather than the microeconomic aspects. The annual increase in the money supply, including the increase in cash, must be legislated, and approved by the State Council or the National People's Congress. Three, we must be equipped with the properly formulated analytical techniques which are essential to the implementation of our monetary policy. Four, we must coordinate our financial, industrial, and foreign exchange policies, and other regulatory measures simultaneously in order to adjust the supply-demand structure, balance international payments, and improve the industrial structure as well as the product mix, among other things, because these elements have a major impact on stabilizing the economy and the product prices. Five, we need more thorough economic and financial reforms, starting with changing the present "soft" restraint on enterprise budgets and operating the specialized banks like enterprises.

In short, only an overall plan which is based on the above conditions can generate the ideal mode of stable economic development and economic functions for this country. We must learn and make discoveries by putting our ideas to practice.

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**Shanghai Finance Market Business Brisk**  
*HK1306091888 Beijing CEI Database in English*  
*13 Jun 88*

[Text] Shanghai (CEI)—The finance market of the Shanghai economic zone has become the biggest one in China with its interbank transactions reaching 30.4 billion yuan over the past year.

The finance market, composed of 59 banks from Jiangsu, Zhejiang, Anhui, Jiangxi, Fujian and Shanghai, was established in May, 1987. Its standing working group, with head office in the Shanghai branch of the Bank of Communications, sends out regularly information about the finance situation of various banks to its member banks.

Interbank transactions are conducted through telephone calls, telex, cable and other means of post services. The highest amount of interbank loan amounted to 50 million yuan and the lowest 300,000 yuan. The longest term was 120 days and the shortest only one day. The highest monthly interest rate was 8.4 percent while the lowest one was 4.8 percent.

**Interest Rates in Money Markets**  
*HK1006130388 Beijing CEI Database in English*  
*10 Jun 88*

[Text] Beijing (CEI)—Following is a chart of the interest rates for short-term interbank loans in a few money markets of China.

city	date	number of transactions	volume of transaction (10,000 yuan)	longest transaction period (days)	shortest transaction period (days)
Shanghai	June 6	1	1000	7	7
Wuhan	June 1	35	15200	120	10
Hangzhou	May 29-June 4	17	7990	123	30
Baoji	May 30-June 4	22	4240	60	3
Wuxi	June 3	5	5300	123	92
Jinhua	May 31-June 3	4	2300	60	10
Harbin	May 29-June 4	1	1000	85	85
Shandong	May 29-June 4	3	1620	60	30
Changzhou	May 30-June 6	4	700	21	15

  

city	minimum interest rate per 1000 (transaction)		maximum interest rate per 1000 (transaction)		weighted average rate per 1000 (transaction)	
	current	last	current	last	current	last
Shanghai	6.18		6.18		6.18	
Wuhan	6.0	6.0	7.74	7.53	6.753	6.797
Hangzhou	5.85	5.85	7.2	7.2	6.47	6.5
Baoji	6.0	6.0	6.6	6.6	6.33	6.33
Wuxi	7.05	6.24	7.3	7.2	7.17	6.783
Jinhua	6.15	6.75	6.9	7.2	6.69	7.045
Harbin	6.3	6.3	6.3	6.9	6.3	6.34

city	minimum interest rate per 1000		maximum interest rate per 1000		weighted average rate per 1000	
	current	last	current	last	current	last
Shandong	6.51	6.3	6.78	7.5	6.69	6.83
Shangz hou	6.3	6.3	7.3	6.39	6.3	6.31

**Commercial Interbank Interest Rates Released**  
*HK1006130188 Beijing CEI Database in English*  
*10 Jun 88*

[Text] Beijing (CEI)—Following is a chart of the interest rates for short-term interbank loans of the industrial and commercial Bank of China:

City	Date	Number of transactions	Volume of transaction (10,000 yuan)	Period of transaction	
				longest (days)	shortest (days)
Harbin	May 26	2	1050	60	30
Nanjing	May 28	12	14800	90	20
Taiyuan	May 30	7	9500	90	10
Zhenzhou	May 24	4	38500	50	12
Nanchang	May 23-31	8	6500	30	20

City	Minimum interest rate (0/00)		Maximum interest rate (0/00)		Weighted average rate (0/00)	
	Current transaction	Last transaction	Current transaction	Last transaction	Current transaction	Last transaction
Harbin	6.15	6.15	6.15	6.30	6.15	6.27
Nanjing	6.00	6.00	6.6	6.39	6.35	6.30
Taiyuan	6.15	6.15	6.36	6.60	6.29	6.33
Zhenzhou	6.15	6.15	6.30	6.66	6.18	6.33
Nanchang	6.00	6.30	7.39	7.39	6.34	6.38

## FOREIGN TRADE, INVESTMENT

### Issues Involved in Adapting Responsibility System to Foreign Trade

40060249 Beijing *GUOJI MAOYI WENTI* [INTERNATIONAL TRADE JOURNAL] in Chinese  
*No 1, 30 Jan 88 pp 21-26*

[Article by Wang Yixuan [3769 1355 6513]: "Carrying out the Contract Responsibility System Presents a New Opportunity for the Restructuring of Foreign-Trade Administration: An Inquiry into Some of the Issues Involved in the Contract Responsibility System"]

[Text]

#### I. The Nature of China's Current Foreign-Trade Administrative System

It has been 8 years since the 3d Plenum of the 11th CPC Central Committee. The reforms we have undertaken during this period have evoked lively discussion but have proved difficult to advance. Nevertheless, we have

gradually gained a clearer understanding of such major issues as how we should view our current foreign-trade administrative system, how we should reform that system, and where that reform should commence.

Our current foreign-trade system, which was borrowed from the Soviet Union after the founding of new China, provides for a highly centralized system of state management; was well suited to the needs of that time, which were related to economic recovery and development; proved effective; and played a positive role in the initiation and development of China's socialist foreign trade.

The system provides for unified state management of foreign trade and includes the following principal elements: The state formulates plans and sends them downward for implementation, owns foreign exchange, assumes unified responsibility for profits and losses, sets wage levels and appoints general managers. The shortcomings of the system are that the state has to bear all responsibility for all foreign trade operations and for defraying all related costs, enterprises eat out of the state's big pot, employees feed from enterprise pots, administration and enterprise overlap, and enterprises

cannot operate autonomously. These shortcomings have become increasingly severe and more prominent as our foreign trade and external economic relations grow, and thus if this "centralized-burden" system is not reformed, the state will not be able to shoulder all its burdens and enterprises will not be able to perform their proper functions.

Our foreign-trade system is a component of and is suited to the nation's entire economic administrative system. The survival and growth of foreign trade is dependent on economic prosperity and on expansion of industrial and agricultural production. For when domestic political conditions are calm and settled and when industry and agriculture perform well, we have more and better products to export, and thus foreign trade grows more rapidly and yields better returns. Conversely, bad political and economic conditions cause foreign trade to grow slowly and yield poor returns. This clearly illustrates that foreign trade is conditioned by the performance of the economy as a whole. Moreover, in China, which is a developing socialist country that has a population of more than one billion and a huge domestic market, market economy has long been underdeveloped, aggregate demand exceeds total supply, and many of our bulk exports are in great demand domestically. Thus to expand foreign trade and earn more foreign exchange, the state has had to intervene administratively and employ planning to regulate and restrain domestic demand so as to meet export requirements.

China's foreign trade is affected by state planning and administrative control over producer goods and materials, prices and taxes. Thus foreign-trade reform, if it is to be thorough, must be synchronized with general economic restructuring.

## II. A Review of the Experiments Conducted over the Last 8 Years in Reform of the Foreign-Trade Administrative System

In the 8 years since the 3d Plenum of the 11th CPC Central Committee, the state has experimented with reform of our foreign-trade system, effecting the following important measures.

-Decentralized authority and permitted specialist supervising departments of provinces (and municipalities) to establish import-export companies, integrate industry and trade and technology and trade, and engage in a specified range of import-export trade and external economic cooperation so as to expand foreign-trade channels.

-Instituted import-export licensing and export quota systems.

-Developed export bases and specialized factories and workshops, adopted policies to encourage expansion of production for export and increasing the range of products available for export, and laid the groundwork for the establishment of export production systems.

-Permitted retention of foreign-exchange earnings so as to encourage localities and enterprises to export.

-Promulgated joint-venture laws, encouraged joint ventures, and adopted a variety of flexible measures to expand exports.

-Devalued the renminbi so as to increase the competitiveness of our exports.

-Established special zones, implemented special policies and flexible measures, attracted foreign capital, developed an externally oriented economy and promoted development of external economic cooperation.

-Established economic development zones in 14 coastal cities to attract foreign capital and technology so as to increase exports.

-Streamlined administration, decentralized authority and expanded enterprise operational autonomy.

These reforms have had a positive effect on and produced impressive results in the development of China's foreign trade and external economic cooperation. Statistics show that as of July 1987 China had used \$33.3 billion in foreign capital (including \$8.1 billion in direct investment by foreign businessmen); established 8,700-plus Sino-foreign joint-equity ventures, Sino-foreign cooperative ventures and wholly owned foreign enterprises; imported 14,000-plus advanced technologies; and initiated 196 key projects. In the past 8 years, our foreign trade has expanded nearly threefold, and the share of exports in national income has risen from 5.6 to 12 percent.

Yet no matter how much we have reformed, we have still failed to make much progress in reducing state responsibility for all foreign trade operations and funding, in eliminating the practice of feeding from the state's big pot, in separating administration and enterprise, in granting enterprises autonomy to conduct foreign trade, and in making enterprises bear responsibility for their profits and losses. If these problems are not resolved, the state will end up having to provide more and more subsidies as exports grow. The masses have vividly summed up the current foreign-trade financial system as follows: If you want foreign exchange, you will have to do without renminbi; and if you want renminbi, you can forget foreign exchange.

Except for agricultural produce, minerals, raw materials and fuels, our other goods, namely our manufactures, cannot compete internationally with products from developed capitalist countries in terms of technology,

quality, and packaging because our scientific and technological levels are low and the quality of our goods is not very good. If an undeveloped socialist country like ours is to compete and to develop socialist foreign trade, the state must centralize control over human, material and financial resources; formulate a unified strategy for development; employ scientific methods; and effect centralized management of foreign trade. That is to say, a "unified system" is required. Our experience since the founding of the People's Republic and the experience of other socialist and developing countries demonstrate that such an approach is feasible. Nevertheless, this does not imply that the state is to assume unified control over everything and bear responsibility for all financing, that we can feed from the state's big pot, that administration and enterprise should overlap, or that enterprises should be subjected to stifling centralized control. Quite the contrary, our mistake in the past was that, under the slogan of "unified system," we treated enterprises as appendages of the government, asserted control over all enterprise operations and finances and focused on the initiative of only the state and ignored the initiative of enterprises and their employees. This approach probably transformed unified, centralized management into a bureaucratic monopoly in which the state assumed control of everything and squeezed out everybody else, thus hindering development of foreign trade.

Experience in reform over the past 8 years has shown that the state's unified management of foreign trade, that is, "the unified system," should involve unified policy, unified planning, unified control over foreign exchange, unified developmental strategy, and a unified and united approach to foreign relations. "The unified system" should entail taking everything into account; correctly handling the relationship between the interests of the state, enterprises and employees; persistent effort to separate administration and enterprise; and gradually laying the groundwork to enable enterprises to operate autonomously, practice independent accounting and assume responsibility for profits and losses. And the system should combine a high degree of centralization with appropriate decentralization, designate special firms to monopolize dealings in products that should be handled in a centralized way (such as petroleum, grain, coal, filament silk, steel, iron, and the like) and decentralize dealings in goods that should be decentralized so as to give full play to the initiative of all quarters. Experience has shown that unified state control over foreign trade is correct.

### **III. An Examination of Some of the Issues Involved in Applying the Contract Responsibility System to Foreign Trade Enterprises**

1. The concept of contract management. The contract responsibility system is based on the principle of separation of ownership and management in state enterprises; uses contracts to define the economic responsibilities, authority and rewards of the state and of enterprises; provides enterprises with the authority

needed to fulfill the economic targets they contract to assume; and also enables enterprises to retain a certain amount of the profits they earn from supraquota production.

Foreign-trade enterprises have long functioned as appendages of government agencies (which is why the state often treats national foreign-trade firms as public institutions) and failed to operate autonomously and to assume responsibility for their own profits and losses. In carrying out contract responsibility systems, enterprises undertake to fulfill several major economic targets assigned by the state in return for greater operational autonomy and greater economic rewards. Under this system, enterprises obtain greater rights to manage and readjust their employment of commodities, capital, workers and welfare funds, which gives enterprises greater vitality and gradually transforms them into true commodity dealers.

Having the state and enterprises sign and notarize contracts means to use law to ensure and protect the obligations, authority and interests of the state and of enterprises; ensures that the state's interests will be served; and also takes into account the interests of enterprises. This system clarifies responsibilities, is easy to enforce, facilitates gradual separation of administration and enterprise, is viable and represents a new step in the deepening of foreign-trade reform.

2. The content of contracts. After summarizing previous reform experience, making complete preparations and fully mobilizing its personnel, the Ministry of Foreign Economic Relations and Trade initiated pilot tests of contract responsibility systems in foreign-trade enterprises at the beginning of this year, contracting all export, foreign exchange costs and balance-sheet quotas over to the enterprises involved. This was a visionary move that will have a far-reaching effect on reform of the foreign-trade system.

The first thing we must decide in this reform is what the contracts should include. At the present stage, they must include export quotas, foreign exchange cost norms and appropriate subsidies to cover losses incurred in export operations. Since big-pot feeding is a major problem in the foreign-trade system, our reform must attack the problem directly. The linkage of export quotas and subsidies means that the state will take the total amount of export subsidies (the big pot) and distribute them (the little pot) to enterprises in accordance with the firms' export quotas so as to cover their losses yet at the same time encourage them to reduce those losses and to liberate themselves. Enterprises, so long as they fulfill their export targets, may keep the savings obtained through reduction in losses but will not be reimbursed for excessive supraquota red ink.

By having enterprises assume responsibility for these three targets, we can ensure that the state will obtain its proper foreign exchange receipts and that appropriate

renminbi inputs will be made. And by making enterprises fulfill export quotas with limited subsidies, we can induce enterprises to improve their management, adopt strong measures, reduce procurement costs, improve export prices, lower administrative overhead and improve service quality—otherwise, enterprises will have to assume the economic consequences of their failure to perform these tasks.

Enterprises will be assigned export targets based on the scale of their operations and be granted subsidies in accordance with those targets. But before these norms are set, we must establish foreign exchange cost norms for general categories of exports. Given current prices on world markets and the actual domestic inflation rate for raw materials, we might consider using the foreign exchange costs approved by the state for 1987 as a base figure, permitting those costs to rise 5 percent each year, increasing export quotas by 7 percent a year over the 1987 targets, and applying these rates to all contracts throughout the nation. With such national base rates, we can ensure that exports increase by 7 percent a year while subsidies rise by only 5 percent. And with export operations dispersed among many ports, this approach would help equalize enterprise export quotas.

Is it better to contract three targets? Or would it be preferable to assign more? Many approaches are possible. But at the current stage, I feel it basically would be better if we stick to three targets, for these targets focus on eliminating big-pot feeding, break the big pot into smaller troughs based on enterprise export targets, provide enterprises with greater operational autonomy, make them bear responsibility for profits and losses, and prompt them to improve their management systems and invigorate themselves. Generally speaking, the more targets there are, the greater the likelihood of administrative interference. So for now, we should not increase the number of targets set forth in contracts but rather should focus on our main problems and seek to resolve them first.

Enterprises would like to have bank export loans included in contracts as supplementary targets so as to meet the needs for capital. Most comrades believe this is a good idea, because exports, which are affected by international market conditions, tend to rise and fall from time to time, so loans should appropriately be adjusted to meet enterprise needs—otherwise, how will banks ever perform their regulatory role? Naturally, banks can refuse to grant loans to enterprises that are poorly run—this, too, is a regulatory function.

3. Contractor selection. China is now implementing general-manager responsibility systems in foreign-trade enterprises across the country in an effort to establish managers' central administrative role. Thus it would be quite appropriate to sign foreign-trade contracts with general managers.

To ensure the effectiveness of the responsibility system, we must include the signing of contracts. In this arrangement, supervising departments representing the state would be side A, while general managers representing enterprises would be side B. Both sides would have to sign the contract, which would then have legal force, and the two sides would assume the legal responsibility.

4. Contract term length. Given actual conditions in foreign trade, contract terms should be long and ideally should be made coterminous with general managers' terms of appointment, that is, 3 to 4 years. For if contract terms are set too short, enterprises will be unable to make long-term plans and proper arrangements for future development, and this situation will probably make enterprises focus instead on immediate gains and neglect build-up of resources, which will impede development of foreign trade.

By linking contract terms with manager terms of appointments, we can link manager goals and contract objectives, which will simplify manager evaluations and help managers achieve optimal results, both in terms of their contract targets and of their administrations generally.

5. How "double-tracking" will work. The contract responsibility system is a new form of management that will be implemented within the current foreign-trade system and is suited both to exports handled under the "procurement-sales system" and to exports sold through agents. Under the procurement-sales system, export subsidies are allocated to foreign-trade enterprises, but under the "agency system," subsidies are distributed through foreign-trade enterprises to producer firms, with foreign-trade enterprises receiving only commissions. Under this new approach, however, some changes must be made in export licensing, export quota management, tax readjustment, foreign exchange retention, and export tax-rebate systems. As for imports, we will have to retain the agency system for a considerable period of time. Thus after contracts are instituted, the new and old systems will continue to coexist for a long time to come.

It would be unrealistic to expect a big country like ours that has a population of one billion to be able to effect a complete transformation of an old system to a new one in a single, one-shot reform package. Instead, we must seek gradually to extend new operational mechanisms and forms and to reduce the role of the old systems so that the new elements increasingly predominate. This approach will moderate the transformation and make it easier for people to accept, reduce social dislocation and prove easier to implement.

Of course, the double-track system will cause a variety of contradictions, which is a price reform inevitably must pay. We must use administrative control, harmonize things and promote what is beneficial and eliminate things that are bad.

6. Enterprise autonomy under the new system. The contract responsibility system is based on the principle of separation of ownership and management, and the new pattern of administration introduced by the system will prove beneficial to publicly owned enterprises. The fundamental things reform must achieve are enterprise invigoration and improving enterprise economic performance.

Invigoration primarily entails granting enterprises operational autonomy in accordance with contract terms, will help guarantee state foreign exchange earnings and renminbi inputs and ensure that enterprise interests are respected, and provides for appropriate separation, as per contract specification, of administration and enterprise so that enterprises receive full operational autonomy, including the right to reassign personnel, manage finances, decide credit and investment matters, distribute bonuses, reward and punish employees and approve trips abroad by small groups. Under the new system, the primary duties of supervising agencies will be to effect macroscopic management; to employ policy, licenses and quotas to effect administrative control over foreign trade; and to use prices, taxation and other economic levers to regulate foreign-trade operations.

The new system may produce the following types of different results. Some enterprises may prove very successful in completing their contract targets, earn profits, give their employees more bonuses, and have more welfare benefits to spread around. This is the way the system ideally should work. On the other hand, some firms might not take their contracts seriously; do a poor job of publicizing the reforms, managing themselves, and mobilizing their employees; and fail to fulfill their targets or, even if they do meet the targets, run greater losses than their contracts allow. We must help these enterprises, and to do so we might consider giving them loans to cover losses so that the enterprises can work things out at a later date. But we must not alter contract terms or change responsibilities, authority or rewards in such cases. Only by being ruthless can we smash conservative resistance. And only by successfully effecting the contract responsibility system can we build up a large corps of managerial experts. A few enterprises may fail to fulfill their targets year after year. Such a performance indicates that cadres of these enterprises are inept and unqualified and that they should be replaced.

7. Reform propaganda. Under the leadership of the CPC Central Committee, we have been carrying out reform of the economic administrative system for more than 8 years and have achieved tremendous success in this endeavor. This reform is being implemented within a socialist system, involves millions upon millions of people, entails great social change, and represents an effort by a socialist system to transform and improve itself. In conducting propaganda for reform, we must publicize the significance and achievements of reform.

Society, by its mere existence, conditions social consciousness, so our reform movement inevitably will touch people's souls. As reform advances, it is bound to clash with traditional concepts and interests, to effect a transfer and redistribution of power and to provoke conservative criticism and resistance. This happened in rural and urban reform efforts and will occur again in our reform of the foreign-trade system. To effect reform, we must mold public opinion and mobilize the entire party and the broad masses of enterprise employees to participate aggressively in this great social transformation.

Without theory there can be no action. The foreign-trade contract responsibility system is to be guided by the principle of separating ownership and management and constitutes a rejection of the practices of having the state assume all management and funding of foreign-trade operations and of enterprise big-pot feeding. In conducting propaganda for this reform, we must publicize the theory of separating ownership and management, stress the evils of eating out of big pots, strive to win the understanding and support of the broad masses of cadres and people, continuously summarize experience and struggle unwaveringly to effect complete reform!

#### IV. Enterprise Operational Mechanisms Following Implementation of the Contract Responsibility System

The term "enterprise operational mechanism" refers to the combined functioning of the motivational mechanism, the risk mechanism, the regulatory-adjustment mechanism and key productive (or operational) factors. This process is manifested as enterprise behavior and the results the process produces are manifested as enterprise operational results.

Briefly, state foreign-trade enterprises will function as follows under their contracts.

Contracts will grant enterprises operational autonomy, which will transform enterprises into interest players who realize they can achieve rewards only by fulfilling contract targets and that better performance will earn fatter rewards. This will help motivate enterprises and their employees to perform to the best of their abilities. Moreover, contracts will enable enterprises to readjust bonus awards and wages so as to mobilize employee initiative, encourage progressive workers and spur the laggard. Thus the new system will make enterprises more motivated.

Contracts will also transform enterprises into responsible actors. The whole idea of "contracting" is designed to induce enterprises to assume strict economic responsibility for their actions and to subject them to greater operational risk. For if enterprises are not run well, if their operational procedures are weak and ineffective and if they fail to fulfill their contracts, the state may investigate the problem and hold them legally and economically responsible. This risk will subject contractors

to a kind of invisible pressure, which alone can motivate enterprises and give them enterprising spirit. By contrast, when enterprises did not have to sign contracts, they could feed from the state trough, they received the same rewards no matter how well they performed, they distributed bonuses equally, and they bore no risk and therefore were not subject to the kind of pressure and did not possess the kind of motivation that risk engenders.

Contracts will grant enterprises operational autonomy, so when business conditions change enterprises will be free to make prompt and flexible readjustments in their productive or operational factors, such as commodities, capital, profits and personnel. This will ensure efficient employment and proper coordination of these factors. And since enterprises will be more highly motivated by and conscious of such notions as "advantages" and "disadvantages," they will make needed adjustments more quickly, which means they will operate more efficiently. By contrast, when there were no contracts, enterprises lacked operational autonomy and had to ask for instructions and wait for permission whenever they ran into new situations, so they did not make prompt and flexible readjustments in their productive factors and thus did not operate efficiently.

Basically, the contract responsibility system is a self-adjusting mechanism. Contracts will permit enterprises to readjust their use of capital, distribution of profits and their operational direction as needed to fulfill contract targets. This will help invigorate enterprises and will facilitate foreign-trade development. Nevertheless, some people are worried that, under the new system, enterprises will lack self-restraint and act only on short-term interests, increase bonus and consumption expenditures, and in some cases engage in predatory operations and blood-thirsty competition. These things could occur. But we can use bonus taxes, wage adjustment taxes, licensing procedures, and market price controls to restrain shortsighted behavior.

On the whole, the new system will provide for more incentive, more vigor, more pressure, better coordination, more flexible and responsive operations and will be a great improvement over the old system.

Experience has shown that the foreign-trade contract responsibility system will serve as a transitional bridge between the current foreign-trade administrative system and a new system that will provide for operational autonomy, independent accounting and responsibility for profits and losses.

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## TRANSPORTATION

### Train Runs Into Locomotive at Gansu Station

OW1706101888 Beijing XINHUA Domestic Service in Chinese 1404 GMT 15 Jun 88

[Text] Lanzhou, 15 Jun (XINHUA) — A XINHUA reporter obtained the following information from the Lanzhou Railway Bureau: Train No.54 from Urumqi, en

route to Shanghai, collided with a stationary locomotive on Track No.2 at Toubahe Station in Wuwei, Gansu, at 0505 on 14 June. The accident was caused by a negligent switchman who forgot to switch the train to Track No.3. Eight persons on the train suffered injuries of varying degrees. The accident delayed Train No. 54 for 1 hour and 40 minutes.

Responsible comrades of the Lanzhou Railway Bureau rushed to the scene to investigate and handle the accident.

## AGRICULTURE

### Journal Calls for Acceleration of Agricultural Scientific Research Reform

40060254 Beijing ZHONGGUO NONGYE KEXUE [SCIENTIA AGRICULTURA SINICA] in Chinese No 1, 1988 pp 1-5

[Article by Liu Zhicheng [0491 1807 3397], Huang Peimin [7806 0160 3046], and Liu Jiling [0491 1376 7117] of the Chinese Academy of Agricultural Sciences [CAAS]: "Adhere to the Spirit of the 13th CPC Central Committee, Accelerate Reform of Agricultural Scientific Research Systems"]

[Text] The 13th CPC Congress systematically set forth the basic theory of the elementary stage of socialism, proposed the basic lines of the CPC in this stage, further clarified that economic construction is the focus of all work, adhered to the four basic principles and the two basic points of reform and opening up, and made whether or not something benefits the development of social forces of production the starting point and basic criterion for examination of everything. This pointed out the road to progress in the construction of Chinese-style socialism in China and clarified the direction of agricultural scientific research system reform.

### Agricultural Scientific Research System Reform Is Imperative

The report of the 13th CPC Central Committee stressed that S&T is the pillar and agriculture is the foundation of the national economy. Moreover, agricultural S&T is the synthesis of the "pillar" and "foundation," so reform of the existing ossified agricultural S&T system to promote progress in agricultural S&T is an urgent strategic task for development of the forces of production and modernized construction.

At present, the main organs engaged in agricultural scientific research include central and local agricultural scientific research units, institutions of higher education, and some scientific research units in the Chinese Academy of Sciences and relevant ministries (and commissions), forming a multi-department, multi-system configuration. Statistics for 1985 indicate that there were 1,169 agriculture, animal husbandry, and fishery scientific research units at the prefecture level and above in China

with 133,000 employees, including 48,000 S&T personnel. These independent scientific research organs have a variety of jurisdictional relationships. Most agricultural (and animal husbandry) science academies at the provincial level are under provincial government leadership, but a small number are under agriculture department leadership. Most of the 428 independent research organs under provincial jurisdiction are under provincial agricultural (and animal husbandry) science academies, but others are under the leadership of agriculture departments. With the exception of a small number of provincial agricultural science academies under unified provincial leadership, most prefecture and city-level agricultural scientific research units are under the jurisdiction of prefectural commissions and administrative offices while professionally they are under dual leadership by provincial agriculture departments or agricultural science academies.

The existing deployment of agricultural scientific research organs essentially was set up on the basis of the 1950's pattern of establishing research institutes according to scientific disciplines and specializations, according to administrative systems and cropping, animal husbandry, or the "eight character constitution," and other single-topic research, and it served to improve the traditional agricultural forces of production at the time. However, this type of scientific research system is very ill-adapted to the needs of current reform in rural economic systems, readjustment of industrial structures in rural areas, and development of commodity economy. The main problems are: 1) From central authorities to local areas, leadership over agricultural scientific research is too decentralized and there are no unified scientific research leadership organs for scientific research tasks in agriculture, forestry, animal husbandry, sideline production, and fishery, economic diversification, and township and town enterprises which carry out comprehensive planning, comprehensive equilibrium, and coordinated administration, which is very unsuited to the need to develop "large scale agriculture." 2) Because research institutes are established according to agricultural administration systems, each develops its research work independently of others in the absence of overall planning and unified arrangements, causing repetition of certain work, scattering of forces, and "general carelessness from top to bottom." 3) Disciplines are not matched up and interlinked, and there is a tendency toward single-topic research and research on production in the absence of comprehensive research on coordinated pre-production, production, and post-production technologies, which affects extension and application of S&T achievements. 4) Agricultural scientific research, technical extension, and agricultural education systems are incomplete and there is no organic integration among the "three types of agriculture," which affects coordination and performance. 5) Scientific research plan management and the personnel administration, administrative expenditures, materials, and capital construction management to guarantee the completion of scientific research tasks are separated and detached from one

another, which has made it difficult to provide the corresponding guarantees of manpower, materials, and financial resources for scientific research tasks. These problems have restricted the vitality of agricultural scientific research in orientating toward economic construction and severely obstructed development of the agricultural sciences. Reform in agricultural scientific research is imperative.

#### The Basic Thinking in Reform

Over the past few years, agricultural scientific research units at all levels throughout China have made definite achievements under the guidance of the CPC's overall principle of reform and opening up in order to adhere to the CPC Central Committee "Decision on S&T System Reform." Overall, however, the steps taken in reform have been small, the vitality of research institutes has not been adequately used, and the initiative and creativity of S&T personnel have not been fully motivated. This is especially true of the lack of proper arrangements for agricultural scientific research systems and the lack of a matchup in reform measures, which have affected progress in reform to a certain extent. Reform of agricultural scientific research systems should consider the following basic principles:

A. The basic goal of agricultural scientific research system reform should be better implementation of the principle of "economic construction must rely on S&T, S&T must be oriented toward economic construction" to open up and invigorate research organs and research personnel, spur initiative in all areas to make more achievements, produce more skilled people, and provide more social and economic benefits.

B. The guiding ideology of agricultural scientific research system reform should consider China's national conditions and the characteristics of the agricultural sciences: 1) China has a vast territory and agricultural scientific research covers a broad area with strong regional characteristics and great variation in natural conditions. As a result, agricultural scientific research organs should be established in a stratified configuration. There should be units which conduct research on national and regional questions as well as units which study local questions, with national-level and local-level agricultural scientific research organs complementing each other to form a national agricultural scientific research network. 2) Agricultural scientific research concerns the biological sciences, technical sciences, and economic sciences, and it has its own theoretical system and technical system as well as long research schedules, so attention must be given to data accumulation and technical reserves. Agricultural scientific research units at the provincial level and above should arrange for specific crack forces to engage in one-step-ahead research so that scientific research work moves ahead of production. 3) Agricultural production is subject to environmental restrictions which are manifested as intense temporal, locational, and conditional characteristics. For China as a whole,

various types of experimental networks and fixed-site observation points should be established in different regions to conduct resource development, formulate regional plans, and so on to provide systematic, comprehensive, and reliable basic data. In addition, we should strengthen horizontal linkages and organize multi-department, multi-specialization, and multi-discipline coordinated research and do good work at organizing cooperation at all levels. 4) China's agriculture is undergoing a transition from self-sufficient production to a large-scale commodity economy, and the agricultural scientific must work for comprehensive development of agriculture, forestry, animal husbandry, sideline production, and fishery, and comprehensive economic diversification of agriculture, industry, and commerce. They should do research not only on production itself but should expand to include pre-production and post-production research. For this reason, differential leadership of agricultural scientific research organs based on the various professional departments in agricultural production with each administering itself and each forming its own system has made it difficult to achieve unified and attributable administration, weakened the comprehensive system of agricultural sciences, and negatively affected comprehensive research on agricultural production issues. 5) Agricultural scientific research, education, and extension are an organic whole with each aspect having its own particular tasks. System reform in the three systems which now have taken shape should focus on proper arrangement of relationships. This does not mean simply combining them or stressing that each must be perfect and interchangeable. We should employ the usual methods of discussion, coordination, and so on to integrate the three closely, with a division of labor and cooperation for mutual supplementation, interdependence, allowing each to use its advantages, and joint development.

C. The long-term goal of agricultural scientific research system reform should be to establish a rather complete agricultural scientific research system on the basis of natural agricultural regions which separates administration and research, including national and provincial bi-level administration, and is conducive to the "two types of opening up." This new agricultural scientific research system should motivate the initiative of all departments, all fields, all specializations, and all disciplines, and it should aid in organizing cooperation for undertaking comprehensive research. It should encourage the initiative of both central authorities and local areas, and it should avoid scattering and repetition in a more rational deployment of scientific research organs. The new agricultural scientific research system should demarcate levels clearly, with prominent foci and discrete emphases. It should use scientific research and extension units at the central, provincial, prefectural, and county levels to relay and complete the entire process of applied basic research—applied research—developmental research—technical extension, and it should permit a small amount of overlap during delivery. There should be different tasks and requirements for

each of the agricultural scientific research organs at different levels: 1) The CAAS and other national-level agricultural scientific research organs should become national agricultural scientific research centers. This means that they should do their own research focused on applied research and applied basic research, work on a national scale to organize coordination and various S&T services for major scientific research tasks, and play a guiding role academically. 2) All agricultural science academies under provinces, autonomous regions, and municipalities directly under the central government should set up agricultural scientific research centers for the entire province (autonomous region or municipality directly under the central government). They should focus on applied basic research and developmental research under provincial government leadership to guide and coordinate agricultural scientific research work throughout the province. Besides research on major agricultural S&T questions in the province itself, they also should take on some national or regional scientific research tasks. 3) Agricultural scientific research organs at the prefecture and city level should, under unified planning for the entire province, make needed readjustments according to natural agricultural regions to become scientific research and development organs with definite regional characteristics and a specialized division of labor for the province as a whole. They should focus on developmental research, and those with the proper conditions should take responsibility for research on some superior specialized topics. They can adopt various patterns and implement dual leadership by provincial agricultural science academies and the city (prefectural commissioner's office) in which they are located. Those with the proper conditions also can be under unified leadership by the provincial agricultural science academy. Some less representative prefecture and city agricultural science institutes and those with poor foundations can focus on S&T development and actively take responsibility for S&T development and technical extension work in the areas in which they are located. 4) County-level agricultural scientific research organs should be reorganized into agricultural technology extension organs, and they should become part of comprehensive county agricultural extension "centers." Their main tasks are experimentation, demonstration, extension, and training work for expanded application of scientific research achievements in their local area. A small number of county-level agricultural science institutes with better foundations and definite qualities can be converted to experiment stations as needed to take over certain regional experiment and demonstration work.

D. One of the operational mechanisms in agricultural scientific research system reform is the adoption of various ways to strengthen the integration of scientific research and production and to promote a transition toward commercialization, socialization, and modernization in the rural economy. Practice in recent years indicates that agricultural scientific research units can establish their own integrated scientific research and

production bodies to produce and sell their own new S&T products, technical advisory services, and technical transfers, participate in construction of agricultural product commodity base areas, provide S&T support for poor areas and technical training, take on assigned experiments or designs, technical contracting, testing services, and many other patterns to open up the channels for the flow of S&T achievements toward production. Because agriculture is restricted by natural conditions, production is unstable, present agricultural product prices are low, agricultural S&T achievements are easily dispersed but do not easily become patents, there are low incomes and large risks involved in agricultural S&T development and S&T markets, and so on. Besides the need for the state to formulate the matching policies to protect the technical and administrative authority and income distribution of agricultural scientific research units, give them preferential treatment in tax collection, and so on, there also should be guidance by categories and differential treatment by regions according to the different categories of research institutes, the relative difficulty of converting agricultural S&T achievements into commodities, the extent of development of the commodity economy in different regions, and so on, which means active and stable opening up of agricultural technology markets. The second operational mechanism involves reform in the management of the allocation of administrative expenditures. Besides continuing to conform to the "CPC Central Committee Decisions on S&T System Reform," having the state continue to provide administrative expenditures to agricultural scientific research organs, and implementing a progressively increasing system of contractual responsibility, we also must continue active explorations of expanded administrative expenditure sources and management by categories, adopting contract systems, science fund systems, progressively increasing contractual responsibility for administrative expenditures, encouraging horizontal income, and other methods according to the characteristics of different categories of S&T activities and the orientation and tasks of different research institutes to increase the ability of research institutes to develop themselves and take the initiative to invigorate services to economic construction.

#### Accelerate the Pace of Reform in the CAAS

The CAAS is a national comprehensive agricultural scientific research organ focused on agriculture and animal husbandry. It has made major achievements in the 30 years since its founding, but its status and role make it quite unable to adapt to the new situation of rural economic system reform and S&T system reform. As a result, we began considering reform in scientific research systems in early 1983, and in 1984 we formulated the "Program for Comprehensive Reform of Scientific Research Management Systems in the CAAS (Discussion Draft)." Particularly important is that after the "CPC Central Committee Decisions on S&T System Reform" were announced in March 1985, we formulated

five documents matched with the reform, including the "Provisional Decisions of the CAAS on Reform in Scientific Research Systems" (27 articles), "Provisional Decisions on the Work of Directors of CAAS Research Institutes," and "Provisional Decisions on the Work of CPC Committees in CAAS Research Institutes," as well as "Provisional Methods for Macro-Level Management of CAAS Test Point Institutes," and so on. Through the reform, some progress has been made over the past few years, but overall, the reform steps taken in the CAAS have not been large ones, full play has not been given to the vitality of research institutes and to the initiative and creativity of scientific research personnel, and reform measures are not coordinated. Based on the spirit of the 13th CPC Central Committee, the CAAS adopted the following strategic measures in the area of scientific research system reform:

#### A. It further clarified the guiding ideology and primary goals of reform

1. Continue more intensive adherence to and implementation of the strategic principle of "economic construction must rely on S&T, S&T must be oriented toward economic construction" and do good work in the four orientations and four services. These are: orienting toward the rural economy, serving the development of rural production; orienting toward the new technological revolution, serving the development of the agricultural sciences; orienting toward leading departments, serving macroeconomic policies; and orienting toward the nation, serving agricultural S&T units.

2. Accelerate reform, closely integrate S&T with the economy, consider the basic goals of reform to be making more achievements, producing more skilled personnel, and striving to improve social and economic results.

3. The basic goal of reform is to use opening up and invigoration of scientific research organs, opening up and invigoration of S&T personnel, reinforced macroeconomic guidance, and organizational coordination to mobilize and organize all primary S&T forces in the CAAS on the main battlefield of developing the rural economy. At the same time, they should support a group of crack forces to engage in basic work, applied basic research, and research on the application of high technology in agriculture, and strive to build the CAAS into a national agricultural scientific research and academic center.

#### B. Use the spirit of reform to reinforce discipline development and personnel development

Building disciplines is the basis for the development of scientific research. Without building disciplines, there can be no development of scientific research. The basic factor in improvement of scientific research levels lies in improving the quality of S&T personnel.

1. Building disciplines: The CAAS now has 199 research offices, departments, and groups. Divided according to discipline, 75.4 percent belong to traditional disciplines, 16.3 percent are newly-emerging disciplines, and 8.3 percent are macro-comprehensive disciplines. The thinking in future reform is update traditional disciplines, reinforce new disciplines, promote comprehensive disciplines.

The main aspects of updating traditional disciplines are to have a clear focus, use existing advantages, continually absorb new theories and new methods of modern science, and expand the depth and breadth of the scope of research.

Reinforcing new disciplines mainly refers to the development of some leading disciplines, marginal disciplines, and intersecting disciplines. Based on the foundation and development trends of work in the CAAS, give consideration to the gradual formation of biotechnology sciences, nuclear agronomy, computer applications in agriculture, agricultural remote sensing, food sciences (storage and processing of agricultural and animal husbandry products), agricultural experimental organizationology, integrated pest management (IPM), and so on. Among these, the focus of development should be on applications of net technologies and the storage and processing of agricultural products.

Promoting the development of comprehensive disciplines refers primarily to agricultural economics and technical economics, agricultural resources and the environmental sciences, agricultural ecology, agricultural zoning, agricultural systems engineering, agricultural development strategies, agricultural information, the history of agricultural, and other disciplines, raising the level of comprehensive research, and providing better services for macroeconomic decisionmaking in leading departments.

2. Personnel construction: The CAAS has over 10,000 employees, including more than 5,000 S&T personnel. Although they have some definite advantages, the potential for a personnel crisis does exist. One thing is that existing advanced S&T personnel are rather old. A second is an irrational age structure of S&T staffs. There are not enough S&T personnel in the 36 to 45 age range, which is at the peak of creativity. A third is the low proportion of graduate students and polytechnical graduates within S&T staffs, which is not favorable for training discipline leaders, and there is a shortage of mature experiment and technical personnel, which has affected overall performance. A fourth is that the structure of specializations within S&T staffs is not ideal and there are too few basic specialized disciplines and physics and engineering specialization personnel, which negatively affects the intersection and permeation of knowledge and the development of modernized agriculture. Thus, during future reform, we must adopt many routes and measures to accelerate personnel construction:

a. Gradually establish optimized colony personnel structures at different levels, use circulation to promote readjustment, and transform the present lopsided structure of two small heads with a large space between them in the formal education and job titles of S&T personnel.

b. Reinforce on-the-job continuing education for scientific research personnel, focus on making up for shortcomings and updating, integrate "expert" and "broad" knowledge, make distinctions for different levels and different personnel, and take aim at different needs for training and improvement. We should make major effort to train specialized discipline leaders, skilled people who are adept at specialized technical operations, "versatile people" and "people with wide knowledge" adept at research on macroeconomic strategies for agriculture, and administrative personnel who understand modern management science. We also should train and improve field experiment workers and auxiliary laboratory personnel.

c. Accelerate the pace of skilled training for young people. Deal with the different categories of young people, adopt differential treatment, train by categories, reinforce practical training, and establish youth S&T funds, youth S&T achievement awards, and superior theses awards, run good graduate schools, and other measures to reveal the talents of young S&T personnel.

#### C. Important measures for intensified reform

1. Reform structural systems. There are six measures: 1) Adopt a pattern of joint administration with local governments for some research institutes and take the initiative to accept local scientific research tasks. 2) Encourage institutes and offices engaged in research on storage and processing of cash crops or agricultural and animal husbandry products and related departments or companies to integrate industry and agriculture or directly join enterprise groups for research to integrate raw materials production, post-production processing, and product sales. With a prerequisite of no new increases in establishments or administrative expenditures and not exceeding the existing number of organs, readjust, combine, or build certain new research institutes or research centers related to food science, livestock and poultry raising, the feed industry, agricultural ecology, development strategies for agriculture and agricultural S&T, and so on. 4) Establish various types of technical service centers, testing service centers, and technical training centers. 5) Establish a group of open laboratories with modern facilities. 6) CAAS functional organs should work to streamline administration, concentrate organs, and establish new systems composed of policy-making systems, implementation systems, supervisory systems, and advisory systems to improve work efficiency.

2. Readjust research projects. We must have a clear perception of both the primary and secondary aspects of development. One aspect is to readjust most of the

projects and S&T personnel in the CAAS as a whole onto the main battlefield of the emerging agricultural economy and actively take responsibility for all types of scientific research tasks oriented toward economic construction, including key scientific research topics or special topics from the state, ministry, commission, and provincial levels; projects for the "spark project" and "bumper harvest plans" to bring prosperity to the rural economy; S&T projects to build agricultural commodity base areas; projects to import, absorb, and digest; all types of horizontal projects assigned by township and town enterprises and related areas; extension projects, S&T assistance to poor regions, and so on. The number of projects and personnel placed onto the main battlefield by the CAAS as a whole should be stabilized at around 80 percent, with 15 to 20 percent of them involved in developmental research. Another aspect is to support some crack scientific research forces to undertake long-term, comprehensive, and basic research on applications of new technologies, agricultural resources and the environment, macroeconomic agricultural development strategies, various new emerging disciplines, and so on to reinforce S&T reserves.

3. Reform scientific research management. Manage on the basis of the five types of research institutes (offices and centers). 1) Basic research institutes should focus on applied basic research and applied research, actively undertake developmental research, and arrange for about 70 percent of their S&T personnel to be involved in applied research and developmental research. 2) Specialized research institutes should focus on applied research, undertake some applied basic research, strive to strengthen developmental research, and arrange for about 80 percent of their S&T personnel to be involved in applied research and developmental research. 3) A small number of research institutes which focus on S&T development should arrange for about 90 percent of their S&T personnel to be involved in developmental research and applied research, and they should undertake a small amount of applied basic research. 4) Research institutes focusing on macroeconomic and comprehensive research as well as regional development should arrange for about one-half of their S&T personnel to be involved in research in the soft sciences and one-half to be involved in basic work. 5) Units or centers with strong social public welfare qualities which focus on technical services or testing and inspection should concentrate on services and arrange for only a small number of their S&T personnel to be involved in research work to raise technical levels. While implementing systems of contract responsibility, fund systems, and contract systems in combination with appropriation systems in the above five categories of research organs, actively encourage increased horizontal incomes and reinforce the self-development capabilities of research institutes.

4. Speed up S&T development. The CAAS has adopted 10 forms in recent years to promote closer integration of S&T and the economy: 1) Using technology shares to enter enterprises; 2) Using joint technology and invest-

ment shares for joint construction of integrated scientific research and production bodies; 3) Using foreign trade joint venture patterns to organize products for export; 4) Using reinforced intermediate testing measures to promote self-production and self-sales of S&T products; 5) Using improved varieties and advanced technologies to enter state commodity production base areas; 6) Using seeds and technical products as shares to establish joint venture companies or seed companies; 7) Providing technical services to integrated trade-industry-agriculture development zones; 9) Actively developing achievement transfers and advisory contracting activities; 10) Using seeds, young trees, and technology to establish integrated scientific research and production bodies and demonstration points in rural areas, and using S&T to assist poor areas. Each research institute should actively apply all forms of S&T development patterns according to their scientific research characteristics, advantages, and strengths, and they should develop them.

5. Perfect matching systems for reform. Use continued practice, continued revision, and supplementation to perfect all types of reform regulation systems. 1) In the area of opening up and invigorating research institutes, on the basis of implementing an institute director responsibility system, they also should implement a term of office goal responsibility system for institute directors and a conscientious examination and evaluation system for cadres. Achieve more concrete implementation of the content of the "CAAS Provisional Methods for Macroeconomic Management of Trial Points" concerning deregulation of the managerial rights, development and administration rights, personnel transfer rights, cadre appointment and dismissal rights, administrative expenditure and equipment management rights, and others in research institutes and, after gaining experience at the trial points, promulgate them throughout the CAAS. 2) Open up and invigorate S&T personnel matters, and on the basis of summarizing practice and experience in technical duties recruiting systems for S&T personnel circulation, including transfers, resignation, leave without pay, temporary engagements, dual appointments, temporary transfers, participating in assistance to poor areas, taking over classes for training, fixed-period downward transfers, and so on, and adopt effective measures to motivate the initiative of S&T personnel toward economic construction. 3) Focus on linkups and matchups for all reform measures and carry them out in a synchronized and coordinated manner, including such things as submitting and inviting bids for projects, various types of administrative expenditure appropriation systems, technical market management systems, and so on, all of which touch upon administrative expenditure utilization, income distribution, and other questions, and they should reinforce survey research, summarize experiences, and use continual practice for additional revision, readjustment, supplementation, and perfection to accelerate the pace of reform and improve management levels.

**Issues in Animal Husbandry Development**  
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[Article by Liu Jiang [0491 3068], of the Ministry of Agriculture, Animal Husbandry, and Fishery, from a speech delivered to the Fifth Annual Symposium on the Economics of the Livestock Industry at the National Strategy Conference on Animal Husbandry Development: "Strategic Issues in Animal Husbandry Development in China"]

[Text] The major pressing issue facing animal husbandry development in China is to settle on China's strategy for developing the livestock industry from the Seventh 5-Year Plan until the year 2000. On the animal husbandry front there has been much lively discussion and research surrounding this issue in the past few years. Here I will discuss my own views on this subject. I invite people to correct these views wherever they are unsuitable.

I

Since the 3rd Plenum of the 11th Central Committee, China has made enormous achievements in animal husbandry. In 1986 the gross value of output in the livestock industry reached 59.32 billion yuan and accounted for 19.7 percent of the gross value of agricultural output (GVAO) (excluding village-run industries). Compared to 1978, gross meat production in 1986 reached 3.33 million tons, up nearly 150 percent; milk output reached 3.33 million tons, up 240 percent; and egg production reached 5.55 million tons, up 140 percent. In terms of average per capita holdings, meat rose 123 percent, from less than 9 kg in 1978 to 19.9 kg in 1986; milk increased 210 percent, and eggs rose 117 percent. The average per capita holdings of meat, eggs, and milk combined reached 28.2 kg in 1986, up 129 percent over 1979. During this period the major features of development in the livestock industry were as follows:

**1. Rapid Development**

During the Sixth 5-Year Plan the value of output from the livestock industry increased at a rate of 10.6 percent per year. Meat, eggs, and milk production grew 8.6 percent, 16 percent, and 16.7 percent, respectively. This growth rate exceeded that in any previous historical period.

**2. Animal Husbandry Has Become a Relatively Independent Industry in Rural Industrial Composition**

During the Sixth 5-Year Plan the GVAO increased 85.05 billion yuan (excluding village-run industries) and the gross value of animal husbandry production rose 13.99 billion yuan. The livestock industry accounted for 16.45 percent of the absolute value of increase in the GVAO. The gross value of animal husbandry production rose 8,254 million yuan in 1985 and another 3,559 million

yuan in 1986, accounting for 61.1 percent and 35 percent, respectively, of the absolute value of increase in the GVAO. This change illustrates that animal husbandry has broken away from its status as an agricultural sideline to become a relatively independent industry in the national economy.

**3. Animal Husbandry Operations Have Begun To Advance Toward Commercialization and Modernization**

The ratio of marketable pork and egg products has increased from 50 percent in the past to about 70 percent today, and the ratio of marketable cows milk in the countryside and city suburbs has reached 90 percent or more. Since the 1980's began the specialized households that have sprung up on commodity livestock-product bases and in the vast countryside—households concentrating on commercial breeding—as well as the somewhat modernized commercial livestock farms, have essentially begun intensive, commercial operations.

**4. A Multi-Channel, Multilevel, Multiform Circulation Network for Livestock Products Has Begun To Take Shape**

In the midst of the mighty tide of rural economic restructuring, particularly after the state reformed its system of state monopoly procurement and assigned procurement quotas, the vast countryside and some small and medium-sized cities deregulated pricing on livestock products. They established a new marketing mechanism for livestock products: a mechanism in which market regulation is predominant and guidance under the state plan is supplementary. Diversified economic methods—unification of animal husbandry, industry, and commerce; joint livestock and commercial operations; direct transactions between animal husbandry and industry; and trading markets for livestock products—have all arisen to meet today's needs. The state, collectives, and individuals are all participating in circulation, and the market for livestock products is unprecedentedly lively.

The rapid pace of development in animal husbandry has arisen primarily for the following reasons:

1. Rural economic restructuring has promoted widespread implementation of the output-related system of contracted responsibility in the countryside. Enormous changes in economic composition have taken place in the livestock industry, and animal husbandry has flourished in peasant households. In 1978, 80 percent of all swine, 33 percent of all sheep, and 50 percent of all cattle were owned individually. Animal husbandry operations on state and collective pastureland also generally put the output-related system of contracted responsibility and other economic responsibility systems into effect. This enormous transformation has spurred the development of animal husbandry in peasant households. The scale of

animal husbandry is comparatively broader than it was, and this has spurred an increase in the gross quantity of livestock products and the volume of commodities.

2. We have made scientific and technological progress. Since 1978 considerable scientific and technological progress has been made in the field of animal husbandry. For example, in some large and medium-sized cities high-output, intensive breeding farms have been built to raise laying chickens and broilers; lean-meat swine and improved fine-wool sheep have been widely popularized; and great success has been achieved by disseminating new techniques for freezing semen, immunizing swine and chickens against communicable diseases, detoxifying cottonseed cakes, mixing feeds, and processing and using powdered forage grass. On a nationwide scale, we have eliminated rinderpest; essentially brought pleuropneumonia, brucellosis, foot-and-mouth disease, anthrax, equine infectious anemia, swine erysipelas, and other contagious diseases under control; and lowered morbidity and mortality among livestock and poultry.

3. The state of fodder resources, primarily grain, has improved considerably. As everyone knows, grain fodder is the material foundation for conversion into livestock products. According to a survey of the facts, from 1952 to 1985 the coefficient of correlation between grain output and the number of pigs slaughtered in China was 0.902. During the Sixth 5-Year Plan grain production in China increased by a large margin, reaching 407.30 million tons in 1984—up 102.55 million tons, or 33.6 percent over 1978. During the same period, fodder grain increased from 34.20 million tons to 58 million tons—a net increment of 23.80 million tons, or 69.6 percent. This large-scale increase in fodder grain is the major factor behind the current rapid growth of livestock products.

4. Consumer demand has been stimulated. According to statistics, in 1985 average domestic consumption of pork per capita in rural and urban areas of China was 14 kg, up 83 percent over 1978. In urban areas average per capita consumption was 19.7 kg, up 43.8 percent, and in rural areas it was 12.6 kg, for an increase of 98.4 percent. Consumer demand has grown, the market is lively, buying and selling are both brisk, and this has stimulated further development in livestock industry production.

## II

We must clearly understand that overall, except for a few animal husbandry units practicing intensive production, right now China's livestock industry is at a rather low level of production—even lagging behind many developing countries.

In one respect the low level of production in animal husbandry reflects the scientifically and technologically backward state of China's traditional household breeding industry. For example, basic livestock production facilities are poor, the ability to resist natural disasters is

weak, and, in particular, pastoral districts still have been unable to break free from the nomadic search for grass and water and from "emaciation in winter and death in spring." Most agricultural regions continue to use traditional production methods and backward breeding techniques. Grain consumption is high and results are poor. The pre-production, production, and post-production service system for breeding improved varieties, disseminating science and technology, mixing feeds, and preventing contagious diseases, as well as storing, transporting, selling, and processing goods, is unsound and imperfect, and service methods and technical facilities are obsolete. The quality of mixed feed is wanting: about 70 percent of our mixed feeds still cannot be produced according to a scientific formula. And, there is a low survival rate in livestock and poultry breeding. These factors stand in the way of improving the quantity and quality of our livestock products.

In another respect, the low level of production in animal husbandry also reflects the irrational economic mixture of livestock and poultry products in China. First, the composition of livestock types is unreasonable: pigs constitute an excessively large proportion. In 1986 pork accounted for 85 percent of gross meat production, whereas fowl, which brings a high return on grain, accounted for only 9 percent. Second, the quality mix in livestock and poultry products is unreasonable. The proportion of high-output, improved varieties of livestock and poultry is less than 10 percent. Most varieties of livestock and poultry we produce have a low production capacity.

The low level of production in animal husbandry simultaneously illustrates that there is still a relatively high amount of waste in our use of livestock resources, and the potential for development is also significant. If we raise China's capacity for livestock and poultry production to the average level that exists in developing countries and take the necessary additional measures, we can vastly increase our volume of livestock products. Projections indicate that we can produce 760,000 tons more beef, 160,000 tons more mutton, 1,143,000 tons more pork, and 2.77 million tons more poultry, for a combined increment of 4,834,000 tons. This is equal to the gross increase in meat products during the Sixth 5-year Plan. If, in addition, we do a good job of epidemic prevention and lower the swine death rate to 5 percent, we can increase pork production by another 1,144,000 tons.

In addition to this backward state of low livestock production, shortages of fodder resources and capital inputs are two major problems that also restrict future development in animal husbandry:

Fodder resources are in short supply. Although China is in the front rank of world nations in terms of the total volume of animal husbandry resources such as cultivated land and grasslands, it falls far below the world average in terms of per capita holdings of such resources. In

particular, the current composition of the livestock industry in China relies too much on grain. In consequence, the shortage of grain fodder will become an essential factor restricting the development of animal husbandry in China. In 1984 average per capita grain holdings in China amounted to 391.7 kg. By the years 1990 and 2000 it is projected that gross grain output will reach 450 million and 500 million tons, respectively. But due to population growth, average per capita grain holdings will still be only about 400 kg—we will not be getting much more grain fodder. According to projections made by the relevant departments, if we wish to achieve the desired ownership of meat, milk, and eggs, then we must attain an output of 125 million tons of fodder grain by 1990 and 153.70 million tons by 2000. The gap between supply and demand will be very large. Obviously, this will affect further development of swine production, which relies on grain fodder. Moreover, from the perspective of grassland resources, there are 3.4 billion mu of usable grassland in the north and 700 million mu of grassland in the south, but our grasslands are facing severe "three erosions." The "three erosions" area covers approximately 30 percent of the grassland area. The grassland/livestock dilemma is prominent: grassland has an extremely low production capacity, producing only 0.25 kg of meat per mu. In addition, as far as resources for breeding livestock are concerned, China has ample energy feed, but is extremely short of protein feed. According to expert projections, China has energy feed sufficient for 136.2 to 141.6 percent of the demand in the current year, so there is a surplus. But we have only 51.3 to 55.6 percent of the protein feed we need to meet demand in the current year.

We are short of funding to develop animal husbandry. According to statistics, in the 28 years following the founding of the PRC, total state funding to assist animal husbandry amounted to 8.74 billion yuan, or 1.6 percent of the value of output from the livestock industry. Investment in capital construction for the livestock industry accounted for only 0.29 percent of this. This serious inadequacy in funding inputs has resulted in weak basic facilities for animal husbandry, and a feeble capacity to resist natural disasters. We can anticipate that because state financial resources are limited, the serious inadequacy of funding for animal husbandry will persist for a long time to come. According to projections, we will need investments of 4.5 billion yuan to build livestock commodity bases during the Seventh 5-Year Plan and 1 billion yuan for grassland construction, veterinary epidemic prevention systems, and the construction of scientific animal husbandry research academies and colleges in livestock regions—for a total investment of 5.5 billion yuan. Yet the state's Seventh 5-Year Plan has set a target of only 700 million yuan for livestock industry capital construction projects. The funding gap is considerable.

### III

Right now animal husbandry is entering a new phase of development in China. In order to suit our overall

strategy for national economic development and continue to meet market demand for livestock products, from the end of the Seventh 5-Year Plan until the year 2000 China's strategy for development in the livestock industry should be as follows: Using scientific and technological progress as the motive force, we should try hard to tap resource and production potential, promote sustained, stable growth in animal husbandry, and establish a high-return production and circulation system for livestock commodities by the end of this century.

This high-return production and circulation system for livestock commodities must at the very least encompass the following features: 1) Animal husbandry must achieve the transformation from traditional to modern methods, and from self-sufficiency to commercialism; 2) Livestock and poultry production capacity must be fairly high, reaching the average world level; 3) The composition of animal husbandry must be perfected, and improved varieties of livestock and poultry—varieties which conserve on grain consumption and provide a high return on feed—must come to account for a large proportion of our stock; 4) We must establish rationally distributed systems to process livestock products and produce them for export; 5) Given that we reorder pricing on livestock products, we must establish a new sliding price structure based on market regulation.

As for the pace of future animal husbandry development in China, although opinions differ, most experts believe it is appropriate to maintain an average annual growth rate of 5 to 7 percent. At a growth rate of less than 5 percent it will be very difficult to meet the ever-growing market demand for livestock products. A growth rate of over 7 percent will be restricted by resources and funding, and will be difficult to achieve. "Haste makes waste."

In order to bring our strategy for developing animal husbandry to success by the year 2000, we must intensify reforms and, from within those reforms, seek out a new, Chinese-style path for developing animal husbandry. Our primary measures should be as follows:

#### 1. Energetically Develop Fodder Resources

By opening up new sources of fodder, improving the degree to which we exploit existing fodder resources, and achieving a better composition in the feed industry, we can resolve the central problems of insufficient grain resources and waste of the resources we do have.

We must reform the cultivation system, popularize grassland crop rotation, and increase the area devoted to growing green manure. Right now China utilizes only about 17 percent of its grain for feed each year. This is unscientific and uneconomical. If we gradually separate feed cultivation from grain cultivation and convert a portion of our grain land over to growing high-protein, high-energy feed crops, livestock products will increase considerably over current production levels.

We must intensify development of grass farming. In the north, in addition to conscientiously implementing the "Grasslands Law" and perfecting the contract responsibility system as it applies to grazing livestock, we must also methodically construct fenced and improved grass farms. In accordance with the principle of grassland-livestock equilibrium, we must actively develop seasonal animal husbandry and increase our rate of effective grass and fodder use. In overloaded pastoral districts, we must make suitable reductions in the number of livestock, particularly horses, being raised, in order to reverse the trend of "emaciation in winter and death in spring." Pastoral districts and semi-agricultural, semi-pastoral districts must work with neighboring agricultural districts to establish economic livestock zones and put the agricultural districts' advantages in fodder and forage grass to good use. They should institute "allopatric fattening" and improve the slaughter rate and proportion of marketable products. In the south we should focus short- and mid-range development on grass farms near villages, on the outskirts of cities and towns, and in low-lying hills, where development conditions are quite good. Then we should gradually extend our attention into distant mountain regions. In form, development should stress family pasturage, small scale, and decentralization.

We must adjust distribution in the feed industry, improve feed quality, and increase the utilization ratio on existing equipment. The feed industry must be distributed in such a way as to avoid operations that are "small and self-contained," or that are set up in an indiscriminate fashion. Right now one important problem is that utilization of capacity is too low in livestock industry feed plants. To resolve this problem, we can "exchange fertilizer for fodder"; that is, we can offer peasant households fertilizer in exchange for raw feed materials. We must expand our feed sources by exploiting and using food industry leftovers, various kinds of rice-dregs cakes, marine products and resources, monacellular proteins, and powdered legumes, and by scientifically using straw and aquatic fodders and other feed channels.

## 2. Increase Funding Inputs for Animal Husbandry

Seeing that state financial resources are limited, and that, in addition to increasing state investment to raise funding for animal husbandry, we should uphold the principle of using the proceeds of animal husbandry to benefit animal husbandry, the suggestion made by relevant departments to establish a "state fund for the development of animal husbandry," is a good one. The fund should be drawn from state, collective, and individual operations that deal with livestock and animal products, and should be figured into costs. The proportion withdrawn may be calculated based on the actual monetary value of procurement or sales of various livestock and poultry products. The animal husbandry sector can control and utilize this fund in common, and can entrust the relevant departments to collect it by

proxy. The central government and local areas will divide the funds based on the proportion one part profit withheld to two parts retained. The fund will be administered on a project by project basis, primarily for building bases to produce livestock products and for improving service facilities and methods. Pastoral regions must further perfect their methods of using "grass-farming funds." In large and medium-sized cities and economically developed regions, we must continue to use industry to aid animal husbandry in many ways. At the same time, we must encourage peasant stock farmers to invest in developing animal husbandry. In addition, we must import foreign capital and advanced technology through equity joint ventures and compensation trade.

## 3. Energetically Adjust the Composition of the Livestock Industry

Adjusting the composition of the livestock industry is the key to establishing a system to produce grain-saving, high-quality livestock products. First we must adjust livestock varieties to suit local conditions: we must stabilize the overall number of swine now being raised and work hard to improve the slaughter rate; give priority to developing poultry—which brings a high return on grain—focusing on broilers and laying chickens; and actively develop beef cattle, mutton sheep, geese, rabbits, and other grazing livestock. Second, we must adjust the composition of livestock and poultry breeds, selecting those that are superior and eliminating those that are inferior. In the near and intermediate future we must vigorously develop lean-meat swine, high-quality broilers, beef cattle, mutton sheep, and meat rabbits. In addition, we must adjust the composition of livestock herds, arrange a rational ratio of dams, and raise the proportion of marketable livestock.

We must guarantee in policy the readjustment of composition in the livestock industry: 1) In the future, the focus of construction on livestock commodity bases should be on livestock and poultry breeds that bring a high return on feed, and we should give this effort priority in terms of credit and services; 2) Year by year we should reduce the livestock subsidy, and use this lower subsidy to increase investment in poultry and egg production; 3) We should apply pricing policies to arouse enthusiasm for adjusting the composition of the livestock industry; 4) We should open up quality price differentials and implement high prices for high quality; 5) We should reform the system for assessing technical and economic standards in animal husbandry, and in the future we should concentrate on assessing the rate of coverage with superior breeds, the rate at which livestock and poultry breeds that produce a high return on feed are popularized, the ratio of grain to meat (or eggs), the slaughter rate, and the percentage of marketable products.

## 4. Constantly Improve the Level of Livestock Veterinary Science and Technology

Existing departments engaged in research, education, and technological extension work in livestock veterinary

science must rationally divide up the work and conduct a coordinated campaign centered on pressing technical problems in the livestock industry. They must concentrate their forces to successfully tackle key problems and promote technical progress. I recommend that they join forces with production and management units and specialized livestock-farming households to form various kinds of research/education/production economic associations. In the near and intermediate future we must make grain (or grass), breeds, diseases, and management the key issues and concentrate on disseminating new techniques and new breeds: the development, utilization, processing, and storage of new fodder grains and grasses; superior varieties of livestock, poultry, and grass seed; embryo transfer; allopatic fattening of the year's lambs and calves; grassland improvement and fencing; and diagnosis and immunization against major contagious diseases.

We must be responsible for building a system of animal husbandry services. Basic-level service stations must do a good job of reforms, focusing particularly on comprehensive services. They must also rally closely around the various pre-production, production, and post-production links in the livestock industry and develop seriate services. We must gradually improve service methods and raise the quality of techniques and services. Animal husbandry service organizations at all levels must not only be responsible for disseminating new animal husbandry techniques and livestock breeds, they must simultaneously become production organizations worthy of the name. Through various services and economic means, they must get specialized households and the vast number of peasant herdsmen on track producing livestock products and commodities. And through various training methods, they must improve the scientific and educational level of stock farmers.

##### **5. With Respect to Livestock Products, We Must Perfect Market Regulation and Control, Reorder Pricing, and Further Stimulate Circulation**

The market for purchasing and selling livestock products must be deregulated, prices should be set as indicated by local markets, and we should gradually establish a new mechanism based on market regulation. However, taking into consideration how much social and state financial resources can support right now, as far as swine are concerned, we can only adopt a method of gradual deregulation, level by level, region by region, and stage by stage. We must gradually and appropriately increase swine procurement prices and bring procurement and sales prices on swine into line with the market. Where the market has already been deregulated, there must be no backtracking. Some large and medium-sized cities can temporarily operate under a "two-track system." Each locale can determine when to deregulate based on when conditions are ripe.

Wool procurement is an extremely technical matter. Except for supply and marketing cooperatives, livestock departments, and those wool marketing cooperatives that meet conditions, no other departments, enterprises, or individuals should engage in wool procurement. The wool that local wool-spinning enterprises need should be obtained by relying on economic means; we must not erect local blockades. I recommend direct contacts between industry and animal husbandry, joint industrial/livestock operations, and joint livestock/industrial/commercial operations. The state should set a price guide for wool, and everyone who calculates the price based on the percentage of pure wool must adopt policies to support state wool. In order to arouse enthusiasm for using state wool in wool-spinning enterprises, I suggest that the state institute financial subsidies for those enterprises that rely primarily on state wool. It should also raise prices and tariffs on imported wool and implement a policy of "using exports to breed imports."

We must vigorously reform the system of animal husbandry administration, which has been characterized by the separation of animal husbandry and commerce and by disjointed production and marketing. We should gradually reorder the relationship between production and marketing in the livestock industry. In addition to actively developing economic associations combining animal husbandry, industry, and commerce, we must also energetically publicize the new experience of unification that Tianjin, Shenyang, and Jianyang County have undergone. With every means and format at our disposal, we must integrate animal husbandry with commerce and create unified production, supply, and marketing operations.

##### **6. Make Rational Adjustments in the Distribution of Livestock Product and Commodity Production**

We should methodically develop livestock and poultry production bases on or near commodity grain bases and gradually establish a "three-unit" composition of coordinated development and organic integration among farmers, breeders, and the industries that process livestock products. To resolve problems of meat, milk, and egg consumption in large and medium-sized cities, it is not necessary to over-emphasize the degree of self-sufficiency. We can establish livestock product bases in the countryside and develop horizontal associations with agricultural and pastoral districts. Coastal districts and developed inland animal husbandry districts must create the conditions necessary to establish a number of systems to produce and export livestock products and develop a livestock industry that generates foreign exchange. Given that we successfully develop our service system, I strongly advocate that we create economies of scale and persist in following a path of development based on specialized households.

**Country's Economic Problems Analyzed in Article**  
**40060242 Tianjin NANKAI JINGJI YANJIU [NANKAI**  
**ECONOMIC JOURNAL] in Chinese**  
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[Article by Gu Zhongfang [7357 1813 5364], Marxism-Leninism Teaching and Research Office, Tianjin Traditional Chinese Medical College: "Problems and Alternatives in Taiwan's Economic Development"]

[Excerpts]

### I. An Analysis of the Factors Behind Taiwan's Economic Development

On the whole, Taiwan's economic development since the 1950s has been rapid. A newly industrialized region, Taiwan, together with Hong Kong, Singapore and South Korea, has been honorably dubbed one of the "four little dragons" of Asia and has therefore attracted much attention.

Roughly speaking, Taiwan's economy has developed through the following stages over the past 30 years. From 1950 to 1964, the island used its limited resources and \$1.5 billion in American aid, focused on developing its domestic economy and achieved an average annual GNP growth rate of 7.7 percent. From 1965 to 1973, the island took advantage of the greatest economic boom in capitalist countries since World War II to liberalize its economic policy, establishing export processing zones in Kaohsiung, Nantze and Taichung; using favorable terms to attract foreign and overseas Chinese investment; developing an externally oriented export economy; and achieving an average annual GNP growth rate of 11.1 percent. However, from the 1970s onward, capitalist economies went into recessions, recovered only after mid-1982, and have grown sluggishly since. Since Taiwan's economy had become externally oriented, her economic growth was inevitably affected by these trends, which caused the island to enter a period of slow economic growth. From 1981 to 1985, Taiwan's economy posted an average annual economic growth rate of only 6.7 percent.

In 1986, the island's economy began to turn around. According to statistics issued by Taiwan authorities, the island's economic growth rate rose from 5.08 percent in 1985 to 10.77 percent in 1986, the highest level posted in recent years. However, this improvement did not result from domestic changes but rather from fortuitous, external developments, which are as follows. (1) The U.S. dollar depreciated. From September 1985 to March 1987, the New Taiwan [NT] dollar slowly appreciated against the U.S. dollar as a result of American intervention in exchange rates. Yet Taiwan's exports to America did not decline during this period. Meanwhile, the NT dollar greatly depreciated against the Japanese yen, the West German mark and the French franc, which development enabled Taiwan to increase her exports to these countries. And the rise of the yen against the U.S. dollar

enabled Taiwan to seize some of Japan's export markets. Thus, on the whole, these developments were conducive to the growth of Taiwan's externally oriented economy. In 1986, the island's exports climbed 29.5 percent, and her imports rose 20.3 percent, a marked improvement over the rates posted in 1985 (when exports rose by 0.9 percent and imports fell 8.5 percent). (2) The slump in world oil prices. The price of oil, which stood at \$28 per barrel in 1985, plummeted to \$13.4 in 1986. Taiwan depends on imports for 99 percent of her oil supply. The crash in oil prices, therefore, reduced the costs of Taiwan's products and thus enhanced the competitiveness of her exports. (3) Psychological expectations. Taiwan entrepreneurs anticipated that the NT dollar would continue to climb and therefore tried to increase output as fast as possible so as to increase exports before the currency rose too far.

### II. The Difficulties Confronting Taiwan's Economic Development

Taiwan's economic development faces the following four difficulties.

A. Taiwan has an island economy. First, Taiwan lacks mineral resources and is very dependent on imported raw materials, especially energy sources. Though the island does have 200 million tons of coal reserves, these are low in quality and costly to extract. Thus most industrial raw materials must be imported. Second, Taiwan, with a population of only 19-some million, has a small domestic market, which was already saturated by the late 1950s.

Taiwan's export market is overly concentrated in America, which accounts for nearly one-half of the island's total exports, taking 37 percent of that total in the 1970s, 45 percent in 1983, 49 percent in 1984 and 48 percent in 1985. According to statistics issued by the U.S. Department of Commerce, every 1 percent rise or fall in the American GNP respectively increases or reduces Taiwan's exports to the United States by 5 percent. This shows how dependent Taiwan is on U.S. markets. On the other hand, Taiwan is overly dependent on Japan for imports. The island's trade deficit with Japan began to rise dramatically after the mid-1970s, standing at \$1.0 billion in 1970, \$2.0 billion in 1980, \$3.45 billion in 1981, \$2.1 billion in 1985, and totaling \$22.2 billion between 1963 and 1982. No matter how hard the island's 61,360 registered trading firms try, they cannot compete with Japanese companies in Taiwan, especially the big ones, for approximately 75 percent of Taiwan's imports and exports are actually handled by Japanese. The persistent Japanese monopoly of Taiwan's foreign trade is a source of concern to knowledgeable Taiwan observers.

Taiwan's fate, therefore, is clearly controlled by the United States and Japan. Although Taiwan has suffered one economic slump after another due to overreliance on foreign trade, the island has been unable to escape this predicament. The massive trade surplus with America

has engendered protectionist responses in and trade disputes with that country, which in 1984 rescinded the preferential treatment accorded to a number of Taiwan products and forced Taiwan to revalue the NT dollar, reduce tariffs on American goods and relax import restrictions. Meanwhile, Taiwan began to face a myriad of competitors on international markets, was squeezed out of some of her markets by the other "little dragons," and saw her American and other world markets gradually supplanted by the electronics and clothing products of Hong Kong and the color TVs of South Korea. Fierce international competition has merely exacerbated the fragility and dependence of Taiwan's externally oriented economy and made it difficult for the island to maintain stable economic development.

#### B. The Island's Excessive Foreign Exchange Reserves Raise the Specter of Inflation

Since 1965, when Taiwan inaugurated an economic program "emphasizing development of foreign trade," the island's authorities have continued to stress expansion of this sector, as they notably did in their 10 Year Plan for the Development of Taiwan's Economy, which declared that export trade development "is one of the strategies for promoting stable economic growth." Under this policy, Taiwan's trade surplus gradually grew, from \$1.412 billion in 1982, to \$4.836 billion in 1983, to \$8.497 billion in 1984, \$10.6 billion in 1985, \$15.6 billion in 1986 and may reach \$18 billion in 1987. These huge surpluses have caused the island's foreign exchange reserves to swell continuously, totaling \$70.0 billion at the present time. But if foreign exchange reserves represent wealth, does it necessary follow that the larger one's reserves, the better? No. The following analogy has been used to elucidate the problem. Reservoirs are used to store water, but there is a limit, which we can call the danger level, to how much water they can hold. When this level is exceeded, the dam might burst. Economic experts believe that an appropriate level for a nation's foreign exchange reserves is an amount equal to that nation's total imports over a 3-month period. If this level is exceeded, problems will result. At such a rate, therefore, Taiwan should maintain only \$6-10 billion in reserves, yet the island has many times this amount, which poses a potentially explosive problem.

Taiwan has long maintained controls on foreign exchange, prevented free foreign exchange buying and selling, and required exporters to sell their foreign exchange earnings to the "central bank" or to other designated banks in exchange for NT dollars. These provisions have set off a great expansion in the circulation of the Taiwan currency, which expansion reached 40 percent in early November 1986 and 50.2 percent in February 1987 and long ago exceeded the danger level of 20 percent. This situation is very harmful for the following reasons. (1) It threatens to set off inflation and creates pressure on the NT dollar to appreciate against the U.S. currency. (2) The large trade surplus stems primarily from Taiwan's trade with the United States,

which situation will provoke protectionism in America and prompt Americans to step up pressure on Taiwan to restrict exports to the United States and to further revalue the NT dollar, which reached the rate of 31.98 to 1 U.S. dollar on 21 May 1987 and has soared 23 percent over the past 18 months. Further appreciation of the NT will be a fatal blow to Taiwan's export-based economy. Professor Hou Chia-chu [0186 1367 7467] of Taiwan's Soochow University stated, "The exchange rate will be a real dilemma in 1987. For there is much pressure on the NT dollar to appreciate, yet businesses will not be able to bear up if the NT does rise, and many firms will surely go under if it reaches 32:1. On the other hand, if it does not appreciate, the 'central bank' will have to intervene, and there will be terrible inflationary pressure." (Taiwan's CHING-CHI CH'IEN-CHAN [ECONOMIC OUTLOOK] No 5 10 Jan 1987)

#### C. Difficulties in Transforming and Upgrading Taiwan's Industry

Taiwan focused on economic recovery during the 1950s, developed export processing industries in the 1960s, developed chemical and other heavy industries in the 1970s and has tried to effect industrial transformation and upgrading in the 1980s. The two oil crises that erupted after 1973 rocked the world economy and destabilized Taiwan's foreign trade, which showed a "u-shaped" growth curve during the period since, growing by 28.1 percent in 1980, 11.1 percent in 1981, 6.2 percent in 1982, 10.5 percent in 1983 and 16.1 percent in 1984. After 1980, the island began to suffer a shortage of technicians, whose money wages consequently soared, thus setting off a steady rise in costs, which in turn caused Taiwan to lose its advantage in labor-intensive production and led to a decline in the island's export economy, which was rooted in light and textile industries employing cheap labor. Taiwan therefore urgently needs to improve its trade mix. Experts attending the Sixth Scientific and Technological Advisory Conference convened in April 1984 by the Taiwan authorities stated that the island must shift from labor-intensive to technology-intensive production, or else it will find itself up a creek economically. Yet since labor-intensive industry has been stressed for so long, it still accounts for approximately 70 percent of the island's total industry. Thus the process of transformation and upgrading has been very slow and has not made as much progress as expected. The primary reasons for these failings are as follows.

1. Taiwan has been unable to raise the large amounts of capital needed to develop technology-intensive industry. Experts estimate that, to complete the program of industrial transformation and upgrading, the island will need about \$150-170 billion. Although foreign exchange reserves have swelled during the 1980s, entrepreneurs, due to a crisis of confidence, remain unwilling to invest on the island and prefer to transfer their funds abroad, which tendency has exacerbated Taiwan's persistent problem of capital flight. For example, a total of \$39.26

million was invested abroad in 1984. Meanwhile, fixed-capital investment on the island has fallen, from a rate of 36 percent in 1980, to 3 percent in 1981, -6.2 percent in 1982, and -4.2 percent in 1983. The rate rebounded to 10 percent in 1984, but fell again in 1985 to -6.1 percent and rose by 9.78 percent in 1986 due primarily to the 14 important construction projects. To raise needed capital, the Taiwan authorities have promulgated a series of regulations designed to attract foreign investment and technology imports. American investment on Taiwan totaled 1.07 billion from 1966 to 1983, and Japanese investment totaled \$480 million between 1953 and 1983. This investment enabled the island's electronics, chemical, machinery, instrument and other new industries to grow rapidly but, on the other hand, also produced a number of negative effects. First, American and Japanese investors in Taiwan on average earned returns of more than 30 percent, a rate that exceeds the international average by 2-3 times, and, under the guise of technical cooperation, invested outmoded equipment on the island. Second, American and Japanese, especially the latter, transfer second-rate technology to Taiwan so that the island's export industries cannot become strong enough to compete with Americans and Japanese on international markets. Third, Japan's investment on Taiwan perpetuates that country's huge trade surpluses with the island. In short, if these trends continue, Taiwan's machine, instrument, chemical, electronics and other industries will surely suffer some domination by private monopoly capitalists from the United States and Japan, and Taiwan's economy will inevitably become more and more dependent on foreign capital.

2. Taiwan has been slow to develop new technology, and its technical work force has flooded abroad. Pressured by the new technological revolution, Taiwan must focus on developing new technologies if the island is to make new investment of fixed capital. Yet progress here has been very slow. Given Taiwan's current technological capabilities, domestic and external markets for the island's goods are already saturated, and the island cannot absorb any more new investment. One important cause of this poor performance is the serious brain drain among Taiwan's technicians. Data published in issue no 7 of SHEHUI KEXUE DONGTAI [TRENDS IN SOCIAL SCIENCE] show that, out of 70,435 Taiwan residents who went to the United States to study between 1950 and 1983, only 7,460, or 10.59 percent, returned to the island. The figure did improve a little between 1981 and 1983.

3. Enterprises have shown little willingness to invest. Medium and small firms, which comprise 98 percent of the total number of enterprises on Taiwan, concentrate on short-term profits and do not undertake long-term, visionary investment. The willingness of large firms to invest is particularly important, but these firms face tremendous costs in their effort to upgrade their equipment, huge investment entails great risk, and any mistake will lead to considerable losses, so these enterprises have also shown little inclination to invest.

The above factors have produced one difficulty after another in Taiwan's effort to transform and upgrade her industry and have clouded prospects for developing technology-intensive industry on the island.

#### D. Taiwan's Economic Structure Is Lopsided, and the Island Has Serious Sectoral Imbalances

Taiwan's overreliance on foreign trade has inevitably led to rapid development of sectors related to export industry and to the neglect of heavy and associated industries, which tendencies have made the island's basic industry extremely weak, created serious sectoral imbalances, and aggravated the lopsidedness of the island's economic structure. Guided by the policy of "having everything serve exports," Taiwan authorities have made agriculture a sacrificial goat, permitting agricultural technology to stagnate, the farm labor force to age, and agricultural productive forces to steadily deteriorate. Taiwan statistics show that only NT \$110-some billion was invested in agriculture from 1973 to 1985. Such imbalances and lopsidedness have prevented the island from escaping its economic predicament and from embarking upon the road to stable development.

### III. Trends and Options in Taiwan's Economic Development

To overcome their economic problems, the Taiwan authorities convened a financial conference on 6 November 1984, where the authorities proposed "liberalization and internationalization" of the island's economic "system." By "liberalization," the authorities primarily meant granting enterprises import freedom and operational autonomy in the hopes of engendering free competition wherein the fittest vanquish the unfit. And by "internationalization," the authorities meant strengthening economic ties with all parts of the world, on the one hand encouraging Taiwan firms to invest abroad so as to expand the island's world markets and on the other hand attracting overseas Chinese and foreign capital so that Taiwan could "unleash the energies of the domestic populace" and "withstand external shocks and influences." The fundamental goal here was to effect "industrial upgrading" so as to escape the island's economic predicament. These policies of "liberalization and internationalization" might achieve some success in the short term if the world economy does not go into a major recession, but, as stopgap measures directed against symptoms rather than the cause of the disease, the policies are very unlikely to work as expected over the long run. This is because the Taiwan authorities have failed to provide clear and practical measures and steps to effect the policies; "liberalization and internationalization" and the effort to transform and upgrade the island's industry will require tremendous amounts of capital, which have yet to be raised; Taiwan remains at a disadvantage in its effort to introduce overseas Chinese and foreign capital and technology; and the United States, Japan and other countries are attempting to exploit the policies to strengthen their control over

Taiwan's economy, for the slavish calls mouthed by Taiwan businessmen and economists for "liberalization and internationalization" will in fact serve to "let the fox into the chicken coop," as it is the United States and Japan (especially private Japanese capital) who will actually profit from the policies. "Liberalization and internationalization," therefore, are not fundamental remedies for Taiwan's economic plight.

To escape dependence on American and Japanese capital and to strengthen Taiwan's fragile economy, the island's businessmen are taking advantage of every opportunity to sell their products in the huge market of mainland China, which has a population of one billion, and are purchasing from the mainland cheap, quality goods and materials that Taiwan needs. Trade between the two sides of the Taiwan Strait is growing in volume and is becoming increasingly direct and two-way. The Hong Kong press has reported that Taiwan has indirectly sold \$1.3 billion worth of goods to the mainland via Hong Kong, Japan, Singapore and other places. And other sources report that, during the first half of 1987, Taiwan exported \$530 billion of goods to the mainland through Hong Kong, a rise of 53 percent over the same period in 1986, and that the mainland sold \$140 million worth of products to Taiwan via the same route—a small figure to be sure, but one that represents a 98 percent increase over 1986. From these statistics, one can see that indirect trade between the two sides of the strait is surging. (Taiwan's CHING-CHI JIH-PAO, 10 Oct 1987) In 1985, the mainland leaped to become Taiwan's fourth largest export market. Taiwan businessmen, for their own survival and growth, are increasingly ignoring the authorities' "three no" policy, which development has forced the authorities to become more flexible and to "secretly relax" their "official" policies and restrictions. Taiwan now permits imports of nearly 2,000 categories of mainland products and on 2 July 1987 rescinded bans on 175 medicinal herbs and agricultural products. Special agencies and 20-odd companies have been set up in Hong Kong for the sole purpose of purchasing mainland products, many of which are openly sold on Taiwan markets.

A new route has been forged in the indirect trade between the two sides of the strait—the province of Taiwan-Hong Kong—the mainland, and direct, barter trade has also sprung up between fisherman from the two sides. It has been reported in the Taiwan press that 80 percent of the fishing boats in northern Taiwan have come to the harbors of Fujian, Zhejiang, Jiangsu, Guangdong and other provinces to purchase fish products, which are then sold in Taiwan. (Tzu-Li Wan-Pao, 14 Apr 1987) Indirect trade is generally conducted in the following ways. The first is to set up bases in Hong Kong and then to work out of these bases to initiate production on the mainland. For example, a Taiwan electronics firm that publicly announced it was moving production to Hong Kong actually set up only a liaison office in the port. Some entrepreneurs work through Hong Kong partners to initiate production on the mainland and sell

their products directly abroad. Others use Hong Kong as a station to collect goods assembled on the mainland for quality inspection, packaging and transshipment abroad. Under the second approach, Taiwan businessmen cooperate with foreigners to carry out indirect trade with or to set up factories on the mainland, or the island's firms market Taiwan goods in the mainland through Hong Kong, American or Japanese trading companies. For example, a large Taiwan shoe company has attracted much attention among the island's businessmen for setting up a factory on the mainland through a firm registered in the United States. A third approach, which is the subject of much discussion among Taiwan businessmen, is "accepting orders in Taiwan and producing on the mainland." In the past, Taiwan companies would take their foreign orders to Southeast Asia for production so as to profit from the cost differentials between Taiwan and this region. But these operations have not proven very lucrative, because intermediaries skim off huge commissions. Thus Taiwan businessmen have increasingly turned to a new form of trade—accepting orders in Taiwan and producing on the mainland, where wages are low and whose people are of the same race and speak the same language as those on the other side of the strait. And the 3-month limit Taiwan allows for each family visit to the mainland is more than enough time for businessmen to negotiate and arrange production of their orders there.

Although this opening of trade between the two sides of the strait is just a start and small in volume, it has made Taiwan's businessmen realize that, if the island is to overcome its inherent shortages and fragility, it must turn to the vast markets, labor pool and natural resources of the mainland. And for its part, the mainland, to develop its economy, must attract foreign, overseas Chinese and Taiwan capital and could use the flexible approaches and managerial experience Taiwan entrepreneurs have forged in market competition. The productive structures of the two sides of the strait complement each other very well, and the two sides can continue to supply each other's needs, buy each other's goods, and strengthen economic ties with each other. Every year, Taiwan imports much coal, crude oil, diesel fuel, cotton and other energy sources and raw materials, which the mainland exports. And Taiwan has already sold some synthetic fibers, light industrial goods, machines, electrical products and other goods to the mainland. In sum, the two sides are geographically close to each other so transport between them is convenient, both sides have achieved economic successes that have attracted worldwide attention, and each faces a number of difficulties and possesses certain strengths and weaknesses. Thus both sides will benefit if they use each other's strengths to offset their own weaknesses, exploit their own advantages, support and complement each other, and strengthen trade ties with each other. Such ties will foster economic development on both sides of the strait and enable the two sides to achieve continued, stable economic growth and prosperity.

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